

STAG

FA

# American Fabrics



NUMBER 33

**Indian Inspiration**

SUMMER 1955

R no. 33-34 Summer-Fall '55.



Out of a great new nylon plant

...comes nylon yarn for wedding gowns of elegance and delicacy

There is a new way to look at nylon. It is now in white cascading down in tulle. Imparting this look of femininity to nylon and nylon . . . light, luxurious yet amazingly tear and wrinkle resistant. Into its vast new plant Chemstrand has put the most advanced equipment yet created to make nylon strong, fine, flexible and beautiful. Out of that plant comes the magnificent result: nylon yarn as perfect as man can make it for wedding gowns, peignoirs, evening wraps, ball gowns . . . a dazzling array of the newest and loveliest fashions in the world.

gown styled by PRISCILLA of Boston  
at LORD & TAYLOR, New York  
MARSHALL FIELD, Chicago  
HALLE BROS., Cleveland  
I. MAGNIN, Los Angeles  
NEIMAN-MARCUS, Dallas

Chemstrand makes only the yarn;  
America's finest mills and manufacturers do the rest.

THE CHEMSTRAND CORPORATION, 350 Fifth Ave., N.Y. 1. • Plants: CHEMSTRAND NYLON—Pensacola, Fla. • ACRILAN® ACRYLIC FIBER—Decatur, Ala.

CHEMSTRAND  
NYLON

FA





## *American Fabrics*

*... dedicated to the belief that Fashion begins with the Fabric ...  
that the American textile industry casts a major influence on the  
economic and social aspects of the world in which we live and that  
it has deservedly attained the world's pinnacle from which it can never  
be dislodged. This volume number thirty-three of American Fabrics,  
focussing its editorial spotlight on the creative contribution of Indian  
handicrafts to the textile scene, presents the latest  
developments in the fields of fashion,  
decorative, and industrial fabrics.*

---

Board of Editors: Cora Carlyle, Dr. George E. Linton, Howard Ketcham, Capt. J. A. Murdocke, R. Bissing, Irma Meincke. — Art Editors: W. Lully, Harry Hering, Albert Greenberg. — Vice-President and Advertising Manager: Joseph C. Stein. — Business Manager: Charles I. Rohrlach. — Production Mgr.: Leonard Pinto. — Circulation Mgr.: Marc Ross. — Assistant to Publisher: Christopher Fremantle. — Publisher: William C. Segal.

AMERICAN FABRICS, Empire State Bldg., New York 1, New York.

AMERICAN FABRICS is published quarterly by Reporter Publications, Incorporated, who are the publishers also of GENTRY, a consumer publication for men. Eight dollars per year. Single issue, Two dollars.

Subscription Price to AMERICAN FABRICS, Twelve dollars a year; single issue, Four dollars. Contents copyrighted 1955, Reporter Publications, Incorporated; nothing herein may be used in whole or in part without the written permission of the publishers. — Printed in U. S. A.



## American Fabrics

### TABLE OF CONTENTS

## COVER

*Indian Acrobats.* Mogul painting in the collection of Konrad Cramer.

## INDIAN INFLUENCES IN FABRICS AND FASHIONS ..... 33

Fabrics and design motifs from India are providing a vital influence for creative activity in textiles.

The Persistence of the Great Handicraft Tradition in India, by Pupul Jayakar.

An American designer translates Oriental fabrics into glamorous fashions.

Current fashions derived from Indian inspiration.

Ancient Indian textiles and ornamental arts.

## AMERICAN FABRICS FASHION FABRIC REPORT ..... 49

Last minute news on fabrics, textures and colors which will be in the forefront for fall and winter. Illustrated with representative samples.

## PROGRESS REPORT ON ARNEL ..... 53

This newest of the man-made fibers is making its appearance on the market in a number of blends and all-Arnel fabrics with some important characteristics.

## LIGHTWEIGHT LUXURY ..... 54

A new pile fabric blended of Orlon and Dynel offers glamour with light weight.

## ROSES, CARNATIONS, APPLE BLOSSOMS ..... 56

A classic workable answer to that important question: How to sell more fabrics?

## SHARKSKIN SHOWS A NEW FACE ..... 60

An old-time favorite returns to the fashion stage in a new guise which seems to predict a successful revival.

## TEXTILE WIZARDRY ADDS NEW DIMENSIONS TO FILAMENTS AND FIBERS ..... 62

Report on a new process which imparts desirable characteristics to synthetic fibers through crimping and curling.

## JACQUARDS ..... 66

Do the signs point to a revival of jacquard fabrics?

## A WALK IN THE RAIN ..... 67

Metallic yarns brighten umbrellas for the first time.

## FABRIC PROVIDES A NEW FIELD FOR DISNEY CHARACTERS. . . 68

Popular cartoon figures by Walt Disney parade on fabrics to the delight of children of all ages.

## RETAILING TO THE COLLEGES ..... 70

Style-conscious college students provide a steady market for bedspreads and draperies.

## THE CLEAN FLOOR ..... 72

Reorganization of a textile operation on the basis of the engineering approach provides an example of positive thinking for tomorrow.

## MATTRESS TICKING COMES TO LIGHT ..... 74

An everyday fabric proves to have dramatic possibilities as a decorative fabric.

## INTERLININGS ..... 76

Some amazing facts about fabrics that fulfill an important function but rarely meet the public's gaze.

## WORK AND PLAY CLOTHES ..... 78

The whys and wherefores of the revolution in apparel for leisure and working hours.

## YARN COLORS VS. PIGMENT COLORS ..... 84

A palette of colored yarns holds more possibility for color variety than do paints, contends Howard Ketcham, and illustrates his point with examples from the auto industry.

## ENHANCING COTTON PRINTS ..... 86

A new finish brings cotton fabrics closer to complete wash and wear properties.

## THE HALLMARK OF QUALITY ..... 87

The quest for quality in lace manufacture begun in medieval days continues with the same intensity in the world of machines and mass production.

## A DRESS DESIGNER LOOKS AT THE FABRICS OF INDUSTRY. . 90

Fabrics nowadays refuse to stay pigeon-holed in one category, a fact that makes it imperative to keep an eye on all aspects of the textile industry.

## POLYURETHANE FOAM ..... 92

Announcement of a new lightweight foam that promises to become important to the textile industry.

## 8000 YEARS OF TEXTILES, PART I ..... 93

A chronology of the important events in the history of one of the world's oldest and greatest industries.

## THE CONSUMER WANTS TO KNOW ..... 98

Representing the consumer, Cora Carlyle asks questions and Textile Editor Dr. George Linton gives the answers.

## ADVERTISERS' INDEX ..... 100



**NEW RAYON CHECKS IN WITH A HOMESPUN LOOK!**

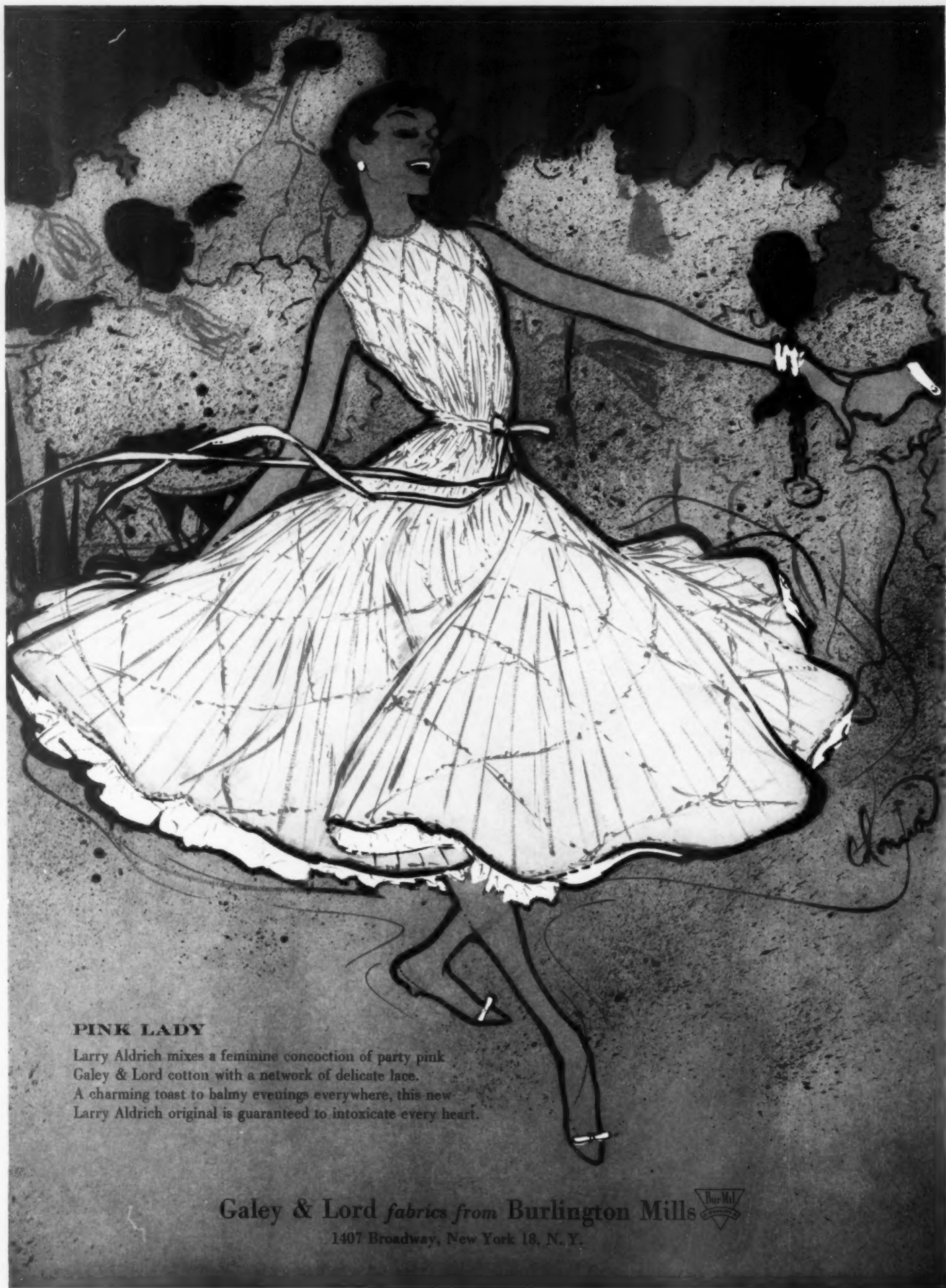
WILROY captures a new charm in checks with  
Avisco rayon and cotton by Fromkin...mates them  
with the solid smartness of Folker's all-  
Avisco linen-like rayon! Lord & Taylor, New York;  
Joseph Magnin, San Francisco;  
Julius Garfinckel, Washington;  
L. S. Ayres, Indianapolis; Marshall Field,  
Chicago; Halle Bros., Cleveland.

*Avisco*®

"Avisco" is the trademark for products  
of American Viscose Corporation  
350 Fifth Avenue, New York 1, N. Y.


BAG BY LESCO  
SHOES BY I. MILLER





#### PINK LADY

Larry Aldrich mixes a feminine concoction of party pink Galey & Lord cotton with a network of delicate lace. A charming toast to balmy evenings everywhere, this new Larry Aldrich original is guaranteed to intoxicate every heart.

Galey & Lord *fabrics from* Burlington Mills   
1407 Broadway, New York 18, N. Y.





GIRLS ARE BORN WITH A LOVE FOR LACE...

*Laces by  
America*

*American Textile Co., Inc.*  
25 East 31st Street, New York • Mills: Pawtucket, R. I. • In Canada: Amelon Ltd., 423 Mayor Street, Montreal

*add an exciting glow to your fashions*

**CHARCOAL EMBERS**



*by*  
**wedgmoor**  
*woolens*

Enriched *new* charcoal flannels,  
aglow with colorful undertones.  
Incomparable values in pure wools  
and Machine-Washable\*, "LANALUX".

Here are your *most promotable...*  
*most profitable* flannels...

**WEDGMOOR "CHARCOAL EMBERS"!**

\*85% WOOL, 15% NYLON. SANFORLAN-LABELED



**wedgmoor woolens** Woven by: Gonic Manufacturing Co.,  
Hampshire Woolen Co., Ware Woolen Co.

Selling Agent: **WOOLMARK CORPORATION, 519 8th AVE., NEW YORK 18 • OXFORD 5-5678**  
BOSTON, MASS., 38 Chauncy St., Hubbard 2-1340 • CHICAGO 6, ILL., 300 West Adams St., Central 6-5982  
LOS ANGELES 14, CALIF., 111 West 7th St., Tucker 1294





DAVID GOODSTEIN CREPE DRESS WOVEN WITH ENKA RAYON 1955 LINCOLN CONVERTIBLE

In automotive fabrics,  
the fashion fiber is

# JETSPUN<sup>®</sup>

*Enka's High-Tenacity, Solution-Dyed Yarn*

JETSPUN, Enka's modern yarn, is the new fashion fiber for automotive fabrics. Jetspun colors are styled by Howard Ketcham and engineered to harmonize with the color styling of today's exciting new cars. • The increased glass area of new cars necessitates that interior fabrics have greater resistance to fading. The exceptional color-fastness of Jetspun makes it ideal for original trim and seat cover use. • The new Jetspun automotive fabrics designed by leading mills are distinctively colorful, durable, shock-proof and comfortable in any weather. • Produced by a similar process employed for Enka's tough tire cord yarns, Jetspun high-tenacity viscose rayon is another contribution by American Enka to America's progress.

**AMERICAN ENKA CORPORATION** 206 Madison Avenue, New York 16, N. Y.

® T. M. REG. U. S. PAT. OFF. BY AMERICAN ENKA CORP.

# IT FIGURES



You want strong,  
tough, long-lasting fabrics  
for uniforms, work clothes  
and industrial uses.

## GET 'EM FOR LESS WITH DYNEL!

DYNEL, alone or blended with other fibers, gives you superior fabric performance you can count on. Long commercial use *proves* DYNEL is extraordinarily resistant to deterioration from water, fire, detergents, chemicals, fungus and abrasion. DYNEL stands up to endless washings without stretching or shrinking. Specifically:

**DYNEL GIVES INDUSTRIAL FABRICS AND CHEMICALLY-RESISTANT CLOTHING:**

High durability, wet or dry • High resistance to acids, alkalies, fire, water, molds and bacteria • Excellent laundry life • Lower over-all fabric cost in rugged service.

**YES, IT FIGURES:** With DYNEL, you get fabrics that have what it takes to make industry buy — because they offer substantially longer useful wear life at lower over-all

costs. That's why DYNEL and DYNEL blends are earning a greater share of this great market every day. To learn what DYNEL can offer your operation, write or call us today.

Textile Fibers Department, Carbide and Carbon Chemicals Company, A Division of Union Carbide and Carbon Corporation **INC** 30 East 42nd Street, New York 17, N. Y.

... FIGURES WILL TELL... IT'S

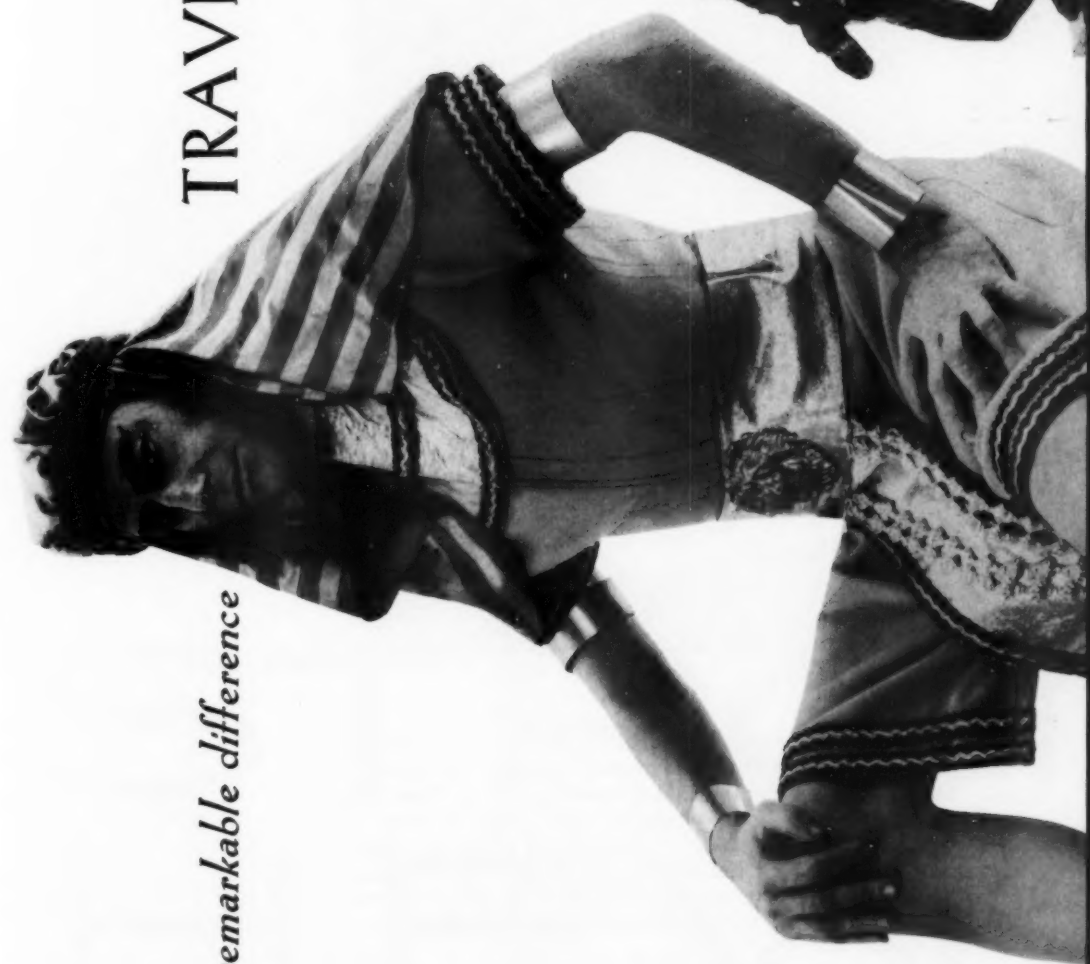
# DYNEL



see the remarkable difference

TRAVIS makes in

dacron-cotton fabrics!



#### PYRAMID 66% Dacron\*—33 1/2% Egyptian Cotton

Just to show you how unique the Travis approach to fabric development is, here are two entirely different luxury fabrics both created of dacron and cotton fibers. Both have fabulous wearing features... but are as unlike as a man's shirt and a cocktail dress.

PYRAMID is as exciting to the shirt maker as it is to the fine lingerie, blouse or dress house. For its soft, cotton-batiste feel is akin to silk... its dacron wear akin to magic. It is cool, comfortable, wrinkle resistant... washes and dries in moments.

#### SHANGRA-LA 80% Dacron\*—20% Cotton

SHANGRA-LA is an exquisite, high-fashion fabric with a shantung weave and a contoured, Far East feel... born to be draped or cut sleek... yet it washes more easily than a hanky... adapts beautifully to every type of men's or women's wear.

Each fabric is a perfectly balanced blend of its own special type of excitement. And that's the specialty of the Travis house... to create rare fabric performance for every special designing need. So call Travis at the slightest sign of a problem... more times than not they'll have the answer on their shelves.

**TRAVIS fabrics, inc.** 330 fifth avenue, new york 1 • the first name in nylon, orlon and dacron fabrics

CHICAGO • PHILADELPHIA • SAN FRANCISCO • LOS ANGELES • PORTLAND • ST. LOUIS • MINNEAPOLIS • CLEVELAND • BOSTON • BALTIMORE • AUGUSTA • DALLAS

\* DuPont Polyester Fiber



Feel the luxury  
of this blend of  
wool and Vicara  
fiber by  
Charlottesville  
Woolen Mills.

Look for the golden  
Vicara hangtag—it identifies  
luxurious apparel for the  
whole family at fine  
stores everywhere.



**Vicara**  
BRAND ZEIN FIBERS

**COUNTRY LIFE** DOESPUN sport coats are more and more frequently chosen as the better half of smart country and campus wear. Because the DOESPUN blend boasts the rich softness of Vicara fiber, these handsomely-tailored coats have the look... the touch...the very texture of luxury. You'll enjoy the fine, easy drape of the fabric...the obliging way it holds its shape... the pleasantly lightweight comfort. And because it's a Vicara blend, your coat will feel richer...mellower...as the years go by.

Tailored by Country Life Sportswear Division, Currick & Leiken Co., Inc.

VIRGINIA-CAROLINA CHEMICAL CORPORATION, 99 PARK AVENUE, NEW YORK 16, N. Y.



# *Eagerly Sought*

BY THE HANDS THAT MOLD FASHION



## **THIS STRIKING STRONG-HEWAT CLASSIC**

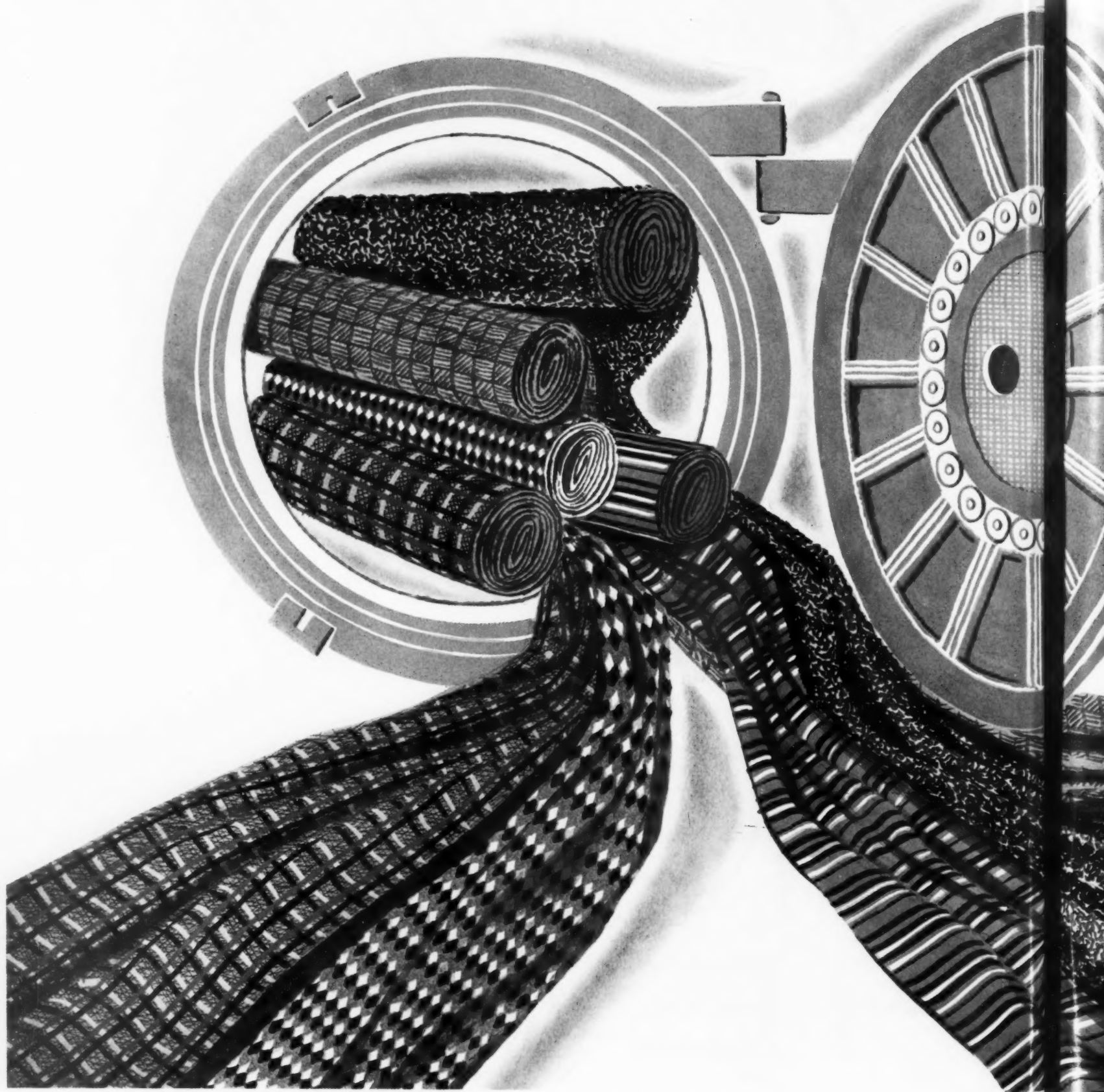
... A STRIKING MOHAIR BOUCLE TWEED COATING IN AN  
INTERESTING RANGE OF SMART COLORS AND WEAVES  
... CREATED WITH AND WITHOUT MULTICOLOR NUBS.

# STRONG HEWAT

STRONG, HEWAT & CO., INC., 112 WEST 34TH STREET, NEW YORK 1, N. Y. • BRYANT 9-2015 • MILLS: NORTH ADAMS, MASSACHUSETTS



*if you want the feeling of* **SECURITY**...



*... accept no substitute!*

## GOOD AS MONEY IN THE BANK!

On the cutter's table or the customer's back SECURITY fabrics know how to behave! You can depend on it, because SECURITY controls every step - from spinning the yarns to the superlative finish. And, in Fashion, we set our sights just as high - with new colors and textures that will be your inspiration - and soundest investment, this Fall.

### THE NEWS IN COATINGS . . .

KURLY-Q, our success-story poodle, now also in iridescents. New SECURAMAT with a rich pebbly texture. ZIBROI, the king of zibelines - polished and sleek in high, bright shades. And more news: ALPA-SEEL that looks fur-real in seal brown, black and navy. Plus SECURA-PACA fleece in all the important pale tones and perennial Fall favorites. Plus PERSHELLA, a fur-like Astrakhan-type fabric. Practical ALPACA LININGS for suburban sport coats and casual jackets.

### IN JERSEY, EVERYTHING CO-ORDINATES

PIECE-DYES and NOVELTIES - rich, nubby tweed effects, herringbones, other smart patterns and vivid stripes. Offering endless possibilities for tone-on-tone separates, skirts, casual dresses! And throughout the collection, you'll see 42 beautiful new VOYAGE COLORS - inspired by England, Paris, Italy and the native American scene.

# SECURITY MILLS, INC.

1441 BROADWAY, NEW YORK 18, N. Y. • PE 6-3828

BOSTON • CHICAGO • LOS ANGELES • ST. LOUIS • DALLAS • PHILADELPHIA • MINNEAPOLIS



# Still the Miracle Yarn

In this Stretch Age where  
new miracles in textiles are claimed  
almost every day, there is only  
*one yarn* that for a quarter of a  
century has never been surpassed

for  
**ultra-high stretch**  
**'live' resilience**  
**great versatility**  
**long-lasting elasticity**

ITS FAMOUS TRADEMARK IS

*Lastex*®

and its earned slogan is  
the miracle yarn  
that makes things fit

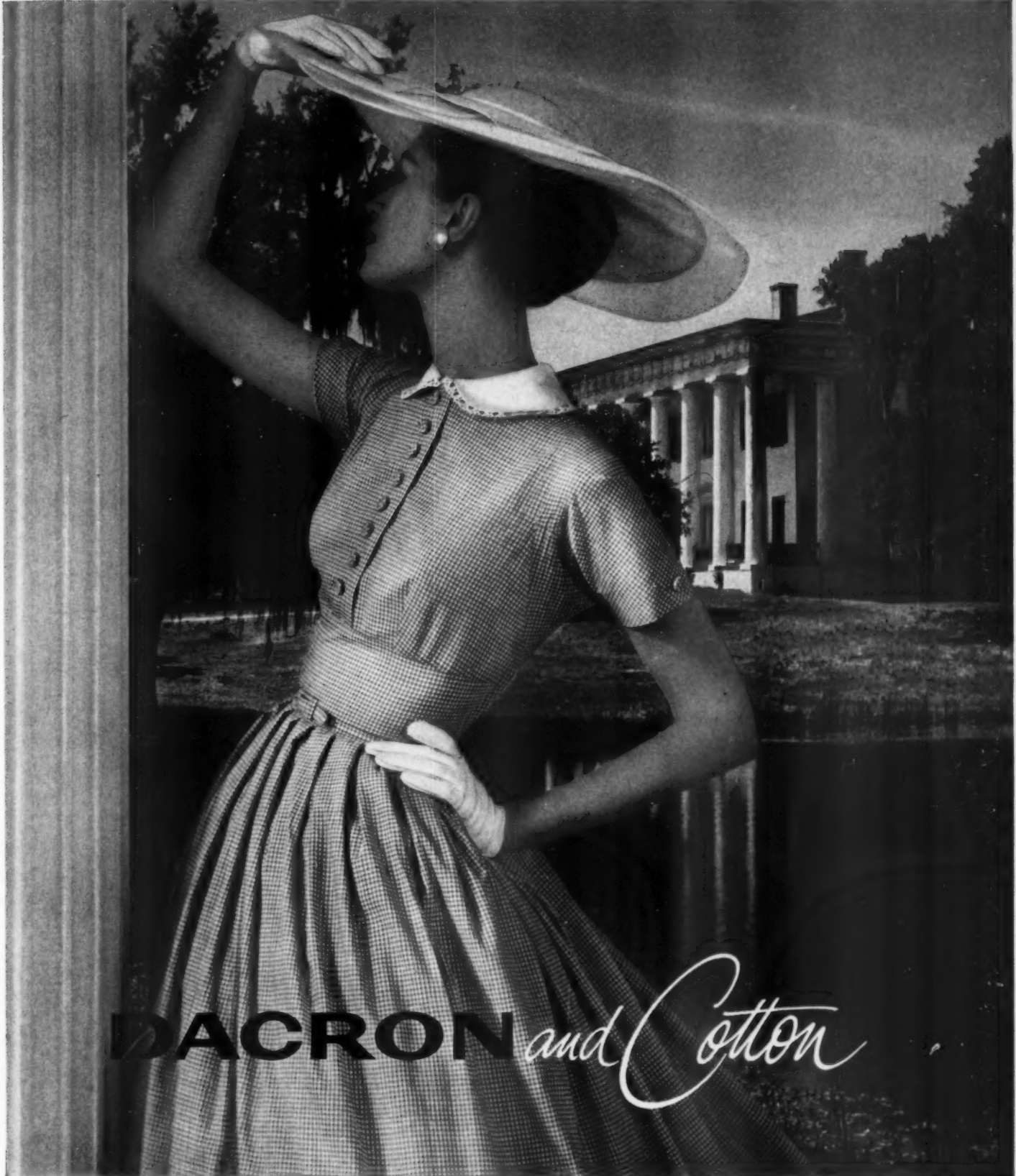


UNITED STATES RUBBER COMPANY

Rockefeller Center, New York



A GREAT NEW HERITAGE IN FASHION...



JOHN FREDERICK MAY

NO WONDER SO MANY DESIGNERS . . . so many smart women . . . have already taken this inspired blend to their hearts. To a host of fabric favorites, "Dacron" polyester fiber contributes staunch, unfailing freshness—without sacrificing a whit of beauty or hand. Like Du Pont nylon and "Orlon" acrylic fiber, "Dacron" makes possible inimitable fabrics of great beauty and unbelievably easy care. There are real profit opportunities awaiting those who style in Du Pont's modern-living fibers.

Du Pont's Modern-Living Fibers . . . "DACRON" • NYLON • "ORLON"

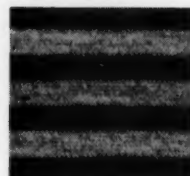
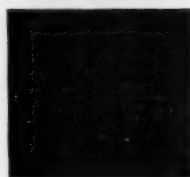
REGISTERED TRADE-MARK FOR  
DU PONT'S POLYESTER FIBER

REGISTERED TRADE-MARK FOR  
DU PONT'S ACRYLIC FIBER



REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING THROUGH CHEAPER COSTS



## HOLLYWOOD **ROGUE** SPORTSWEAR CORP

941 North Highland Avenue • Hollywood 38, California

designed this good-looking "Permatal"- "Everglaze" casual shirt. The shirts come in solid color, a fine line pattern, and a broad stripe, with matching or contrasting trim. Available in heather-brown, beige, grey, charcoal, and navy. At fine stores throughout the country.

## the new shirt with the casual air is the Permatal. Everglaze. shirt

Alamac takes imported Egyptian lisle and rayon—combines them in just the right proportions to create a handsome knitted fabric that's altogether new and different. Sheer and comfortable in weight, with a lustrous silken hand, this amazing new "Permatal"- "Everglaze" knitted fabric resists creases and soil, won't shrink or stretch out of shape, washes like a handkerchief, needs little or no ironing, keeps its new look. For men's wear that knows how to lead a casual life—look to "Permatal"- "Everglaze" fabrics.

**Permatal® Everglaze®.**  
**Fabrics by Alamac**

The finest shrinkage controlled  
knitted cotton fabrics ever!



\* © JOSEPH BANCROFT & SONS CO.



...WHERE SUCCESSFUL LINES START

Fast selling fashions are MADE . . .  
not just born lucky. In fact many of the most talked-about,  
are preceded by a meeting of the minds . . .  
your designers with our textile experts! A perfect merger  
of ideas is bound to result when you consult Beaunit  
during the planning stages of your new lines.  
Many of the top manufacturers  
find that it pays . . . handsomely!

*build traffic with*



BEAUNIT MILLS INC., 450 SEVENTH AVE., NEW YORK 1

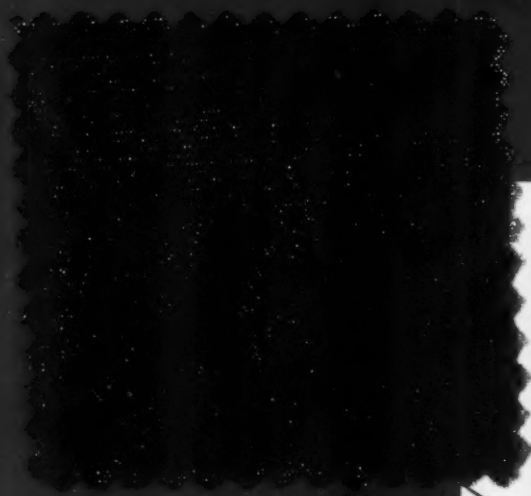


you're

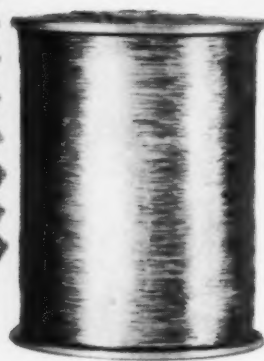
looking

at the

impossible



Metlon in velvet, by CROMPTON-RICHMOND  
In white, aqua, royal, black, red and hot pink.



*\*the non-tarnishing  
metallic yarn*

## METALLICS IN VELVET

They said it couldn't be done . . . that *no* metallic gauge could ever be fine enough to enrich velvet with the drama of fluid gold . . . yet soft and pliable enough to safeguard the luxury of its plush surface. Well, here it is! METLON'S new, incredibly fine, 1/120" gauge heralds a golden age in velvets. Another example of how our textile engineers work hand in hand with America's leading manufacturers to solve the problems of textile development. Let them show you the wonders of METLON in *your* particular field. Write, wire or phone today!

proof again that **METLON**® makes *everything* look better

METLON CORPORATION

432 Fourth Avenue, New York 16, N.Y. MU 3-5962  
A Division of Acme Backing Co.

® REGISTERED TRADEMARK

---

ACETATE-AND-COTTON COMBINATIONS GAINING EVERYWHERE

**Celanese\***

ACETATE, THE BEAUTY FIBER



*Pictured—***STEHLI'S** new acetate-and-cotton jacquard. Actually it is the picture of a trend. Since the first of these combinations were introduced a year ago, they have gained tremendous ground. Because Celanese acetate adds something to cotton which it could never achieve alone. There is the subtle luster. The soft hand. The rich look. The many styling possibilities. And these are turning out fabrics that go into categories where cotton alone would never go. For information on developing acetate-and-cottons see: Celanese Corporation of America, New York 16.

\*Reg. U. S. Pat. Off.



## ABOUT SOME OF THE PEOPLE WHO READ AMERICAN FABRICS

*A look into the circulation files of AMERICAN FABRICS, together with an analysis of classifications of readers.*

Many of our friends have expressed agreeable surprise when they chanced to come upon American Fabrics subscribers not only in the high places of manufacturing and retailing, but in places where they did not expect to find American Fabrics. People have told us of seeing copies in the homes of heads of many of the country's greatest corporations . . . in the libraries, classrooms, and reference rooms of leading universities and training schools . . . in foreign countries on every continent. To bring to life in numbers the vibrant, vital readership and influence of American Fabrics is difficult. But the following analysis, we believe, can be useful to those who wish to get an all-over view of America's key textile publication. In presenting these figures, we have felt it necessary to present a few accompanying comments on an audience which is responsible for making the major textile buying decisions in this country.



*In the  
retail field  
... 6,007*

American Fabrics is read and studied by 6,007 retailers, merchandise managers, buying executives, store presidents, and training department executives in some of the finest and largest retail and department stores of America. For many of the larger stores from three to twenty yearly subscriptions are entered. A cross-section of American Fabrics subscribers in retail establishments includes: *Lord and Taylor, Saks Fifth Avenue, Neiman-Marcus, Bullock's, J. L. Hudson, L. S. Ayres, Marshall Field, Filene's, Jordan Marsh, Higbee, Wanamaker, Auerbach's, Miller and Rhodes, Halle Brothers, W. & J. Sloane, Roos Brothers, Frost Brothers, McCutcheon, Crowley Milner, Macy's, Hartzfelds, The May Company, Famous-Barr, Stix, Baer &*

*Fuller, Scruggs-Vandervoort, Shillito's, Kresge, Joseph Horne, Gimbel Brothers, Frederick & Nelson, Davison-Paxon, Bonwit Teller, Hess Brothers, Lerner Stores, Rogers Peet, Brooks Brothers, Z.C.M.I., Abraham & Straus, Howard Stores, City of Paris, J. W. Robinson, I. Magnin, Eaton of Toronto, Lane Bryant, in fact every important store without exception.*



*In the field  
of fashion  
manufacturing  
... 5,480*

American Fabrics is read, studied, and guides the buying decisions of some 5,480 top manufacturers of men's, women's, and children's apparel. A cross-section of American Fabrics subscribers in fashion manufacturing includes: *Philip Mangone; Maurice Rentner; Handmacher; Jantzen; Henry Rosenfeld; Duchess Royal; Kaylon Company; Cluett Peabody; David Crystal; Baker Clothes; Printz Biederman; Wragge; Strutwear; Munsingwear; Alligator Company; Hart, Schaffner & Marx; Reliance Manufacturing Co.; Society Brand Clothes; Richmond Brothers; Wembley; Palm Beach; Hathaway Shirts; Marlboro Manufacturing; Forest City Manufacturing; John B. Stetson; Gottfried Company; Kickernick Company; Farrington Manufacturing; Adelaar Blouses; Rhea Manufacturing; Jamison; Junior House; Manhattan Shirts; Kenneth Tischler; Rosenau Brothers; Higginbotham, Bailey and Logan; Susquehanna Waist; Baumann Brothers; M. & D. Simon; Louis Tabak; Donnelly Garment Co.; Gernes Garment Co.; Lang Kohn; Justin McCarty; Nardis; Lorch; American Golfer; Ben Zuckerman; Mary Muffet; Beau Brummell; Harford Frocks; Dede Johnson; Carolyn Schnurer; Phillips-Jones; Shircraft; Clopay Corp.; Craig Manufacturing; Catalina; Witty Bros.; Ben Reig; A. Stein & Company.*

*In addition American Fabrics has been*

*repeatedly called first choice among all publications with many top designers and decorators. The following great designing names are included among our subscribers: Dorothy Draper, Dorothy Liebes, Carolyn Schnurer, Bonnie Cashin, Philip Mangone, Adele Simpson, Maurice Rentner, Bob Fatherly, Anne Fogarty, Pahlmann, Kiviette, Bernard Newman, Tina Leser, Claire McCordell, Alex Colman, Montesano, Jo Copeland, Hannah Troy, Howard Greer, Larry Aldrich, Sophie of Saks Fifth Avenue, Brigrance, Clare Potter.*



*In the field  
of industry,  
... 2,840*

American Fabrics is read, studied by, and guides the textile decisions of, executives in 2,840 major companies, including: *American Radiator Corp., Grace Lines, U. S. Steamship Lines, General Motors, Chrysler Motors, Ford Motor Car Co., Studebaker, Kaiser-Fraser, Cessna Aircraft, Radio Corporation of America, Weirton Steel, Bostonian Shoes, Stewart-Warner Corp., Carborundum Co., Chesapeake & Ohio Railway Co., Esso Standard Oil Co., Armstrong Cork Co., General Shoe Corp., B. F. Goodrich Co., U. S. Steel Corp., Dunlap Tire & Rubber Corp., General Tire Co., Glenn L. Martin Co., Bendix Aviation, Grumman Aircraft Corp., Eastern Airlines, The Pullman Co., Fairchild Aircraft, White Motor Co., Briggs Manufacturing Co. . . . and, of course, American Fabrics is subscribed to and helps to mold the thinking of executives in major textile organizations all over the country.*

*\*\*\*Perhaps you, or someone you know, would like to receive American Fabrics regularly. A subscription — \$12.00 for one year (4 issues) — \$20 for two years (8 issues) — will, we believe, give any person with creative interests in any related field a full measure of value.*





BESIDES  
BEING READ  
AND STUDIED AS

an indispensable textile guide by almost every leading industrial fabric user, American Fabrics is subscribed to by special categories of textile-minded organizations including: *United States Bureau of Labor, United States Department of Agriculture, United States State Department, Ice Follies Costume Department, Connecticut Mutual Life Insurance, California Apparel Designers, Hosiery Research Council of England, Silk and Rayon Users of England, United States Information Center of Helsinki, United States Embassy in Cairo, The Shah of Persia, Council of Industrial Design of London, Department of Industry & Development of Canada, United Artists, 20th Century Fox, Warner Brothers, National Coat and Suit Industrial Recovery Board, National Broadcasting Co., Columbia Broadcasting Co., Atlantic City Centenary Association, Thomas Cook and Sons.*

*In addition,* American Fabrics enjoys multiple circulation at the top buying and merchandising levels in the following mail order houses and resident buying units, including: *Sears, Roebuck, Montgomery Ward, J. C. Penney, Chicago Mail Order, Spiegel's, Mutual Buying, A.M.C., Weil and Schoenfeld, Natl. Department Stores, Belk Stores, Henry Rose Stores, Federal Dept. Stores.*

■ We call attention also to a special list of 750 foreign subscribers to American Fabrics. Many of these subscriptions are entered despite currency difficulties by directors of important foreign organizations.

MANY PEOPLE have inquired why American Fabrics makes practically no effort to get more members. Because of the very nature of the book, we cannot produce more than our limit of 19,000 copies of each number. We have felt that we can best serve those people who have a real need and use for American Fabrics. We have never attempted to "sell" or tempt prospective subscribers with special offers, etc. The past has borne out the fact that people who subscribe because *they want to* — not because *we want them* — are the best subscribers. We ourselves are stimulated, encouraged by the responsiveness and the high level of editing which our subscribers demand. And it is our belief that only an interested, responsive audience can serve to inspire a publication like American Fabrics.

*American Fabrics is interested in and does continually seek new subscribers who can make use of the material and information presented in each number . . . and the form which is attached is for convenience in entering additional subscriptions.*

## American Fabrics . . . the basic textile publication for the nation's merchandising executives.



FAR-REACHING INFLUENCE with manufacturers, retailers, merchandise executives . . . because every person who arrives at the point of responsibility for making decisions based on textile knowledge finds American Fabrics an indispensable source book. American Fabrics is recognized as the basic textile publication for key merchandise executives.



FAR-REACHING INFLUENCE with America's great textile authorities . . . because of its undisputed authority and its unique and dramatic tri-dimensional presentation, American Fabrics has been recognized by America's greatest textile authorities themselves as the most reliable authority to present new developments to the world. Organizations such as *E. I. Du Pont de Nemours, Inc., Eastman Kodak, Joseph R. Bancroft & Sons, Inc., Deering Milliken & Co., The Wool Bureau, Inc., American Enka Corp.* . . . plus scores of converters, mills, and processors, etc., have used reprints of American Fabrics articles as educational tools for training schools, stores, consumers. Outstanding textile executives have repeatedly commented on the vital and brilliant way in which important textile developments have been reported and presented in the pages of American Fabrics. and in the wide-spread influence of these presentations.

AMERICAN FABRICS IN THE EMPIRE STATE BUILDING NEW YORK 1 NEW YORK

Please enter the following subscription for American Fabrics.

One year, \$12 ☐

Two years, \$20 ☐

Payment enclosed ☐

Bill me ☐

Name

Company

Address

City  Zone  State



"Apple Blossoms" designed especially for Macy's New York, all branches and associated stores.

## Beautiful Everglaze® Chintz by **EVERFAST**®

"Rose Festival" designed especially for Associated Merchandising Corporation.



For thirty-six years every fabric by Everfast has been backed by the famous color guarantee.

"We unreservedly guarantee that should a drapery fabric by Everfast fade for any reason during the life of the fabric, we will refund not only the cost of the material, but also any reasonable making up cost."

**EVERFAST FABRICS, Inc.**

70 West 40th Street  
New York 18, N. Y.





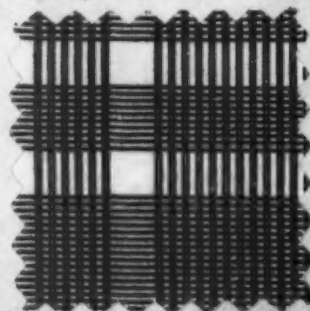
MIXED

DOUBLES . . .

Cotton "partner prints" on a candy stripe theme give zest to coordinated separates. It required adroit handling to involve basic stripes in so complicated a design, without losing the simple clarity essential to the whole idea. Naturally, it became a job for Cranston. Leading converters and their customers know that, the more intricate the pattern, the more important it is to have Cranston precision-printing.

**PRECISION-PRINTED BY CRANSTON**

Taffagleam, a Crown Soap 'n Water fabric, precision-printed by Cranston, in separates by Nelly de Grab. Pink and grey. Blouse, sizes 10 to 16, about \$6 retail; skirt, sizes 8 to 16, about \$9 retail.



Cranston Print Works Company • Sales Offices: 261 Madison Avenue, New York 16, N. Y. • Three plants to serve the converter: Cranston, R. I. • Webster, Mass. • Fletcher, N. C.





**American Fabrics** is the only publication in which you can dramatize your advertisement with an actual swatch of the fabric. Seeing and feeling the fabric is the most effective selling method of reaching your customers.



a symphony of luxurious beauty

princeton's

Orlegro

the man-made fur

Orlegro's magnificent supple-softness actually surpasses nature's most fabulous fur beauty. Yet Orlegro's luxury is far more practical . . . warm without weight, adaptable to every designer's whim. Impervious to the ills of natural pelts . . . moth proof, mildew proof and odorless when wet. Orlegro — the fur luxury women have dreamed of . . . now available in the cloth coat price range.

*Clean it yourself*  
the FUR FROST WAY

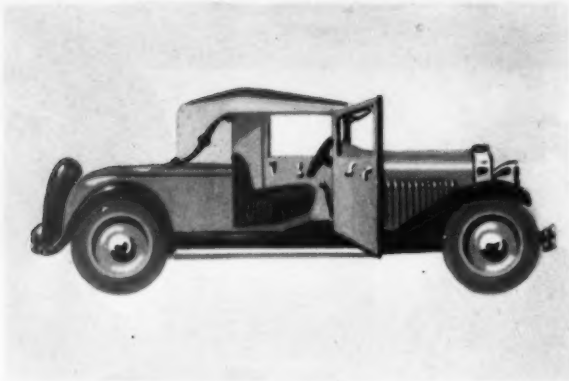
Minimizes costly fur cleanings. No loss of garment use for cleaning purposes. Rejuvenates Orlegro's luxurious beauty in a twinkling.



**princeton**

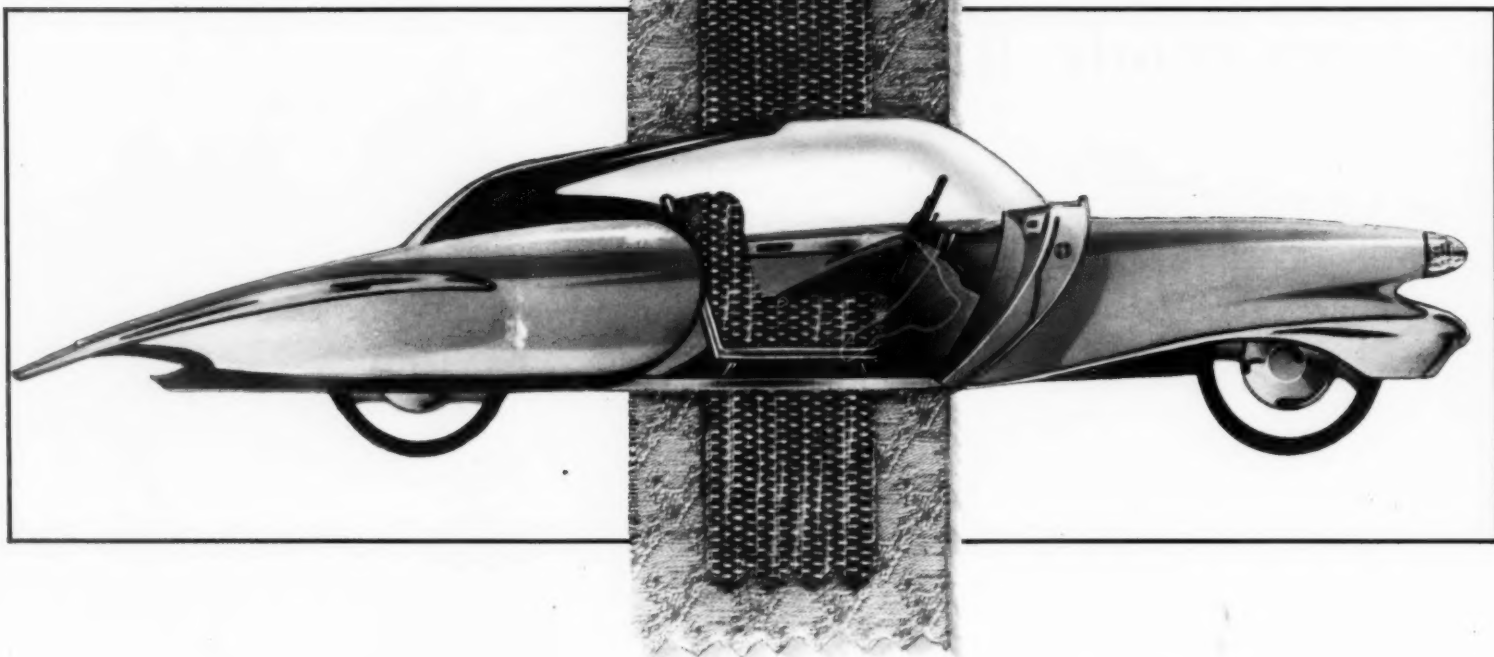
PRINCETON KNITTING MILLS  
450 Seventh Avenue, New York 1, N. Y.





Colorless best describes upholstery in the Twenties.

How automotive stylists make the most of color is beautifully exemplified by the hard-top model shown below. The upholstery and every inch of the interior were color-planned to harmonize with the two-tone body.

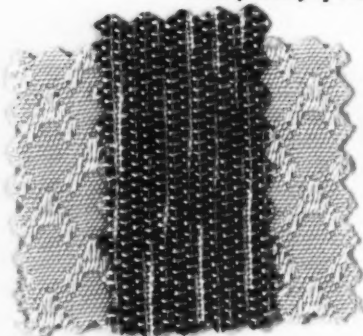


## The driving force is **COLOR**

This year, more than ever, the customer's eye is on color. In fact, automotive sales are so strongly influenced by this single factor that manufacturers now have their designers collaborating with Chatham's Design Department to originate color-coordinated styling that distinguishes—and sells—today's fine cars.

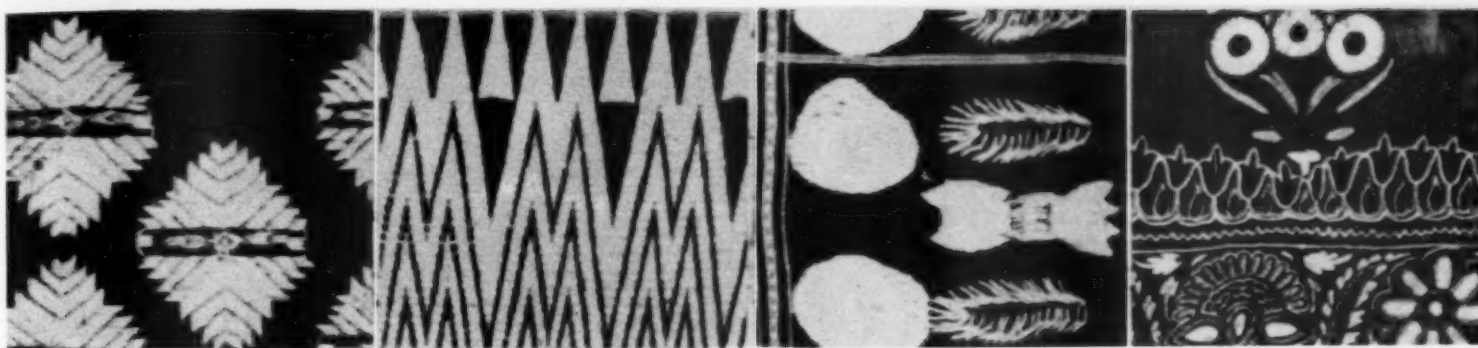
Quality and service have been by-words with Chatham since the company was established over seventy-five years ago. Today, Chatham is one of America's great mills, but its original principles are guarded as a matter of family pride by the fourth generation of Chatham sons. *And family pride is a very good guarantee of quality.*

This is simply one of Chatham's distinguished new patterns in upholstery fabric and bolster fabric, specifically styled to complement the car illustrated above. Foremost automotive manufacturers know that colorful upholstery pays off when it's a Chatham fabric—hardy nylon, rayon and nylon mixtures, Orlon®, on worsted or woolen systems.



Chatham Manufacturing Company • Mills at Elkin, Charlotte and Spray in North Carolina • Automotive Fabrics Representative: Getsinger-Fox Company, Detroit



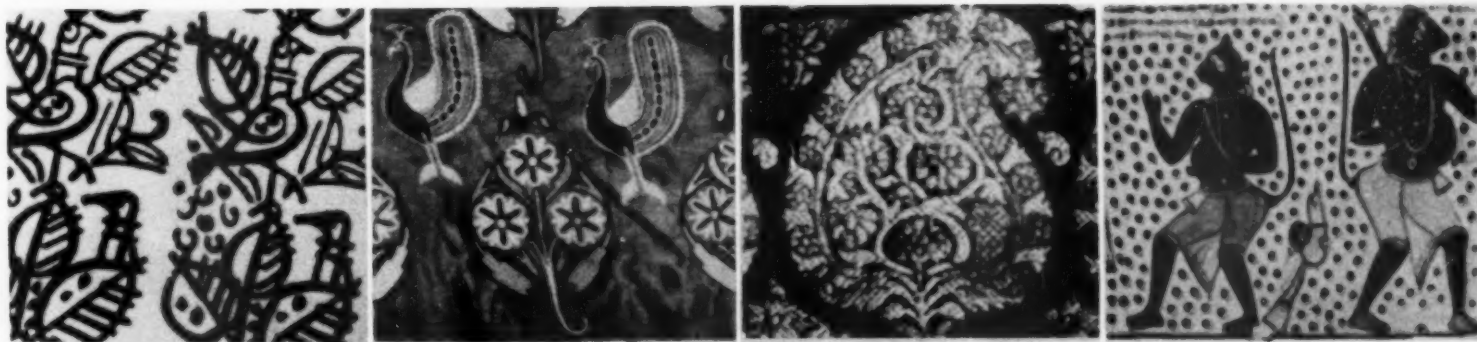


# Indian Influences in Fabrics



*Mask of a tusked boar. Cast Bronze.  
From Madras, 19th Century.*

# and Fashions







## Indian Influences in Fabrics and Fashions

BY PUPUL JAYAKAR

IN INDIA THERE IS a precious conceit that the Asoka tree can only blossom when its longings are fulfilled by the touch of the foot of a beautiful woman. Indian aesthetics expresses a similar attitude to fabrics, which are said to come to life and reveal meaning only when they mold the body of a living woman.

The roots of Indian decorative motifs lie buried, and the approach to color that permeates all aesthetic expression is to be found in the vast dim unconscious of the Indian background with its imagery of the Vedic hymns and its storehouse of the Puranas with their world of Devas and Naga Kings. The motifs that emerge with such startling clarity in Indian fabrics adorn the great stone temples; they appear in the clay and wooden toys, the *rangoli* designs that decorate the threshold on auspicious occasions, the wall paintings to be found on village huts, the great clay gods and animals that guard the entrance to the smallest village in Tamil Nad.

It is into this vast source, this vigorous stream, that the hereditary craftsman dipped, not with any conscious intention, but to do otherwise would have been to deny the sources of his daily life and inspiration. Bound in a guild system and protected by rigid caste laws, the craftsman  
(please turn)

*Mrs. Jayakar is a member of the All-India Handicraft Board of the Ministry of Commerce and Industry, Government of India. This board, organized about three years ago, is an advisory body to the Central Government, concerned with promotion of the work of hand weavers and hand craftsmen in India, and with the distribution and sale of handcrafted goods.*

OPPOSITE: Handloomed silk and silver sarong inspired by the figures of Indonesian puppets, designed by Gibson Bayh for Gump's, San Francisco.



Torso of woman, bas-relief from Barolli, Rajasthan, 9th Century.





GIBSON BAYH

## An American Designer Translates The Great Oriental Fabrics Into Glamorous Fashions

*TO THOSE WHO HAVE a special awareness of what constitutes stature in fashion, the name of couture designer Gibson Bayh has for many years been synonymous with brilliant achievement and lasting beauty of design. With exactitude and skill, Mr. Bayh has designed entrancing gowns from Indian fabrics and Japanese silks for Gump's, San Francisco. He has had at his command the priceless brocades, rare silks and fabrics of museum quality from the Orient*

*Handloomed silk sari cloth gold brocaded evening coat worn with jodhpur-type trousers in emerald green satin.*



## Indian Influences . . . continued

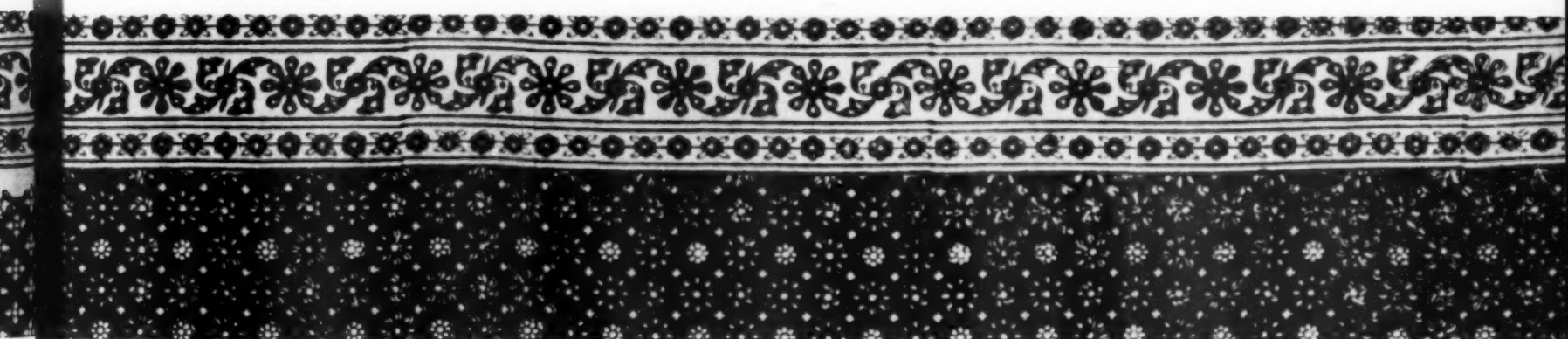
carried on the tradition: father taught son, who in turn taught his son. This led to a preservation of integrity, for knowledge was not purchasable. Forms, color and design varied with individual craftsmen, but these forms were determined within traditional limits.

The craftsman was both the conceiver of design and the producer. This integration of the creative impulse with livelihood, and the absence of the concept of designer intervening between the vision and the product, led to a great flowering of craft tradition in India.

Although knowledge of silk weaving was introduced into India early in her history, it was in cotton that the genius of the Indian craftsmen flowered and found deep and rich expression; and this expression was itself determined by the contours of the countryside. In the west, stretching from Sindh through Kathiawar and Gujarat, was the great color belt, with its resist- and mordant-printed and tie-dyed

filling the cupboards of the Mandarin Room at Gump's. Last year, he spent four months in the Middle East, the Orient, and Europe collecting exotic fabrics from the markets of the world for his apparel collection.

Working with this large and distinguished group of fabrics, Mr. Bayh, through his long acquaintance with them, has been able to apply his unusual creativeness and feeling for exotic fabrics to design a fashion collection of marvelous scope and imagination. Although high fashion is his prime interest, the collection includes as well leisure clothes: simple coolie suits for hostess and home wear, for the garden and beach, made from sheerest cottons to exquisite damask silks. All the fashions shown in this section are Gibson Bayh Originals inspired by Indian fabrics, and part of his new collection.



cloths. It is as if the bare stretches of sand, the fierce noon-day sun and the strange contortions of the trees and bushes demanded the recompense of color. Colors here seem to be roasted and matured by the sun. They form a vital part of the background dictated by the urges inherent in the environment and the character of the people who live there. As we go further south colors lose their brilliance, designs grow in importance, and by the time we approach the thick forests and lush vegetation of the back waters of Malabar, fabrics are void of color — and white is the only garment worn by both men and women.

In the east is the great weaving belt, from Assam through Bengal Bihar, Orissa and Tamil Nad. Right up to the end of the 19th century, cotton weaves of the utmost delicacy of texture were produced in parts of this area. These handwoven cottons were famous in the courts of the Roman Emperors and had names like *Baft Hawa*, or woven air,  
(please turn)

*Handblocked pink elephants on white handloomed cotton. Grosgrain ribbon belt repeats the three important colors.*







Indian elephant toy with traditional decoration, from Shantipur.

and *Shabnam*, or morning dew. They were said to grow invisible when moistened and laid on grass. In ancient sculptures we find statues of women wearing superbly woven garments, so fine that all we can see of the fabric is the brocaded border that molds the rounded limbs.

Two forms of design expression have always co-existed in India. The village tradition, rooted in custom and ritual, was based on a deep understanding of the nature of mass and volume in which color was a vital dimension. The processes of resist dyeing, tie dyeing and yarn dyeing to a pattern before weaving, were the basic techniques for indigenous village cloths. The colors of these cloths were deep lustrous red, black, indigo, off-white or dusty pink and purplish brown. At times two tones of the same colors were used to produce the design — on dark red, the design being in a dull pinkish tone, and on an indigo the relief being in pale blue. A strong resemblance both in color and treatment of design can be found between these village cloths and the prehistoric pottery of this area.

Sensitivity to color has expressed itself in most of the romantic folk poetry of India. Colors were surcharged with emotional content and association. Red was the color of the brilliant tie-dyed sari which the bride wore when she took

(please turn)

OPPOSITE: Handblocked black and white Indian cotton featuring the familiar symbolization of Radha with elephants, in an adaptation of typical sari wrap.

## Indian Influences . . . continued

Fabric with motif design of a peasant bride and bridegroom, adapted from a design painted on the walls of village huts.



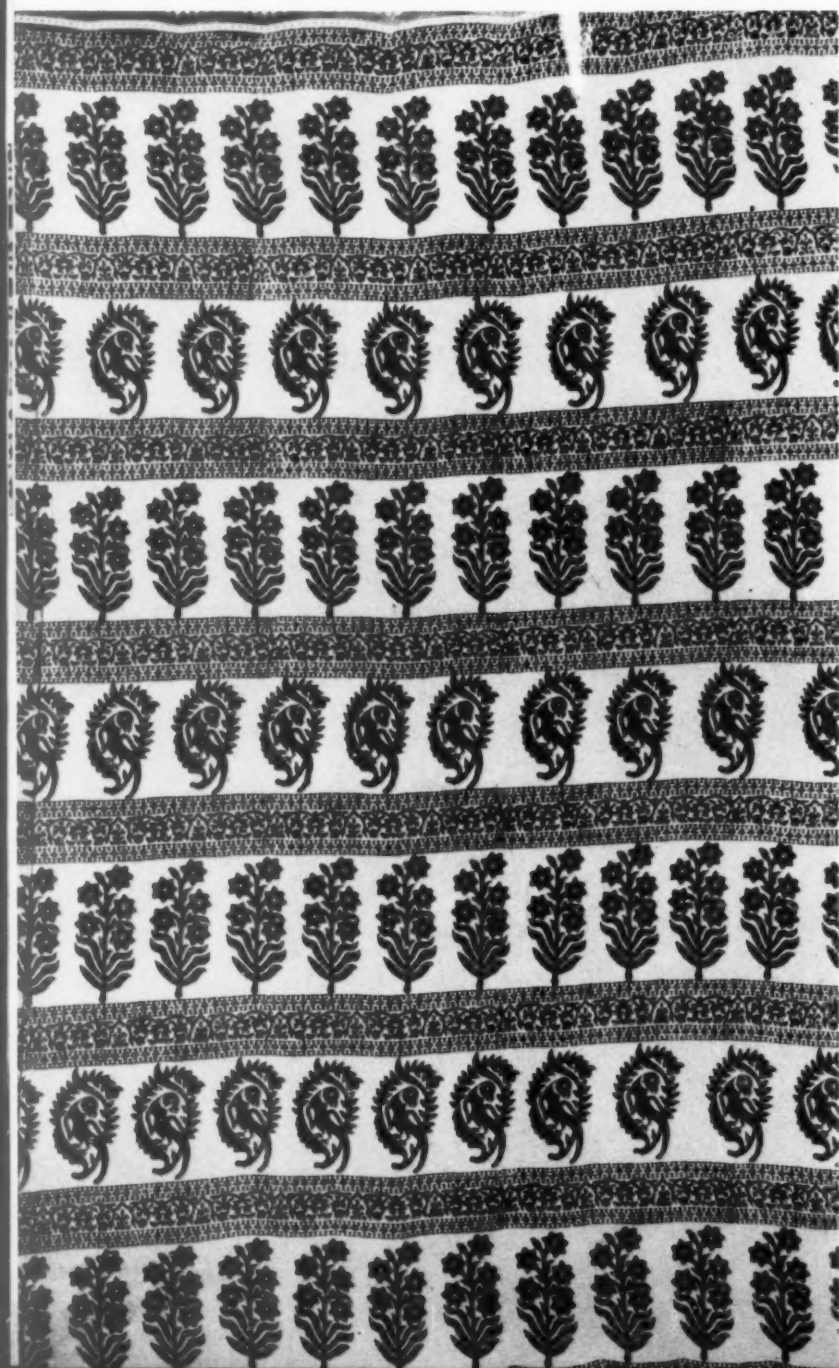






Photo: L. K. Jha.

ABOVE: Gangor wooden figurines, Rajasthan. BELOW: Handblocked Indian silk sari, in collection of the Museum of Modern Art.



## Indian Influences . . . continued

her seven vows round the ceremonial fire. It was also the color of the lac with which she painted her hands and feet. Blue or indigo was the color of Krishna, who was likened to a rain-filled cloud. There was also a blue that bore the name *Hari-nil*, which was the color of water in which a clear blue sky in spring is reflected. These colors when worn by the peasant or householder were but a projection of the colors and clothes worn by the God enshrined in the temple, uniting man more closely to his God.

Patterns in traditional village cloths were geometric and highly stylized. Rings, dots and zig-zag ornaments were used, often in panels both horizontally and vertically. At times these panels were outlined with multiple lines or sometimes with checks. Design in village fabrics broke up the color mass, and gave depth to the background tones.

The courtly tradition demanded from craftsmen a growing sophistication in design and technique. Master craftsmen were attached to courts and rich rewards were given for production of exquisite creations. Indian court fabrics

(please turn)







ABOVE: Indian handmade silk textiles, jewelry and ornamental objects from the Exhibition of Textiles and Ornamental Arts of India, Museum of Modern Art. BELOW: Traditional shawls with Kashmir designs. In the Calico Museum of Textiles, Ahmedabad, India.







*Ayanar clay figurines, South India.*

## Indian Influences . . . continued

flourished, some of the finest examples of which were worn by the king and his nobles. But fashion in court changes with the ruler. The impact of foreign invasions continually demanded from the craftsmen the use of new symbols and conceptions. The emphasis shifted, and the craftsman no longer produced from the totality of his background — he produced to please his master.

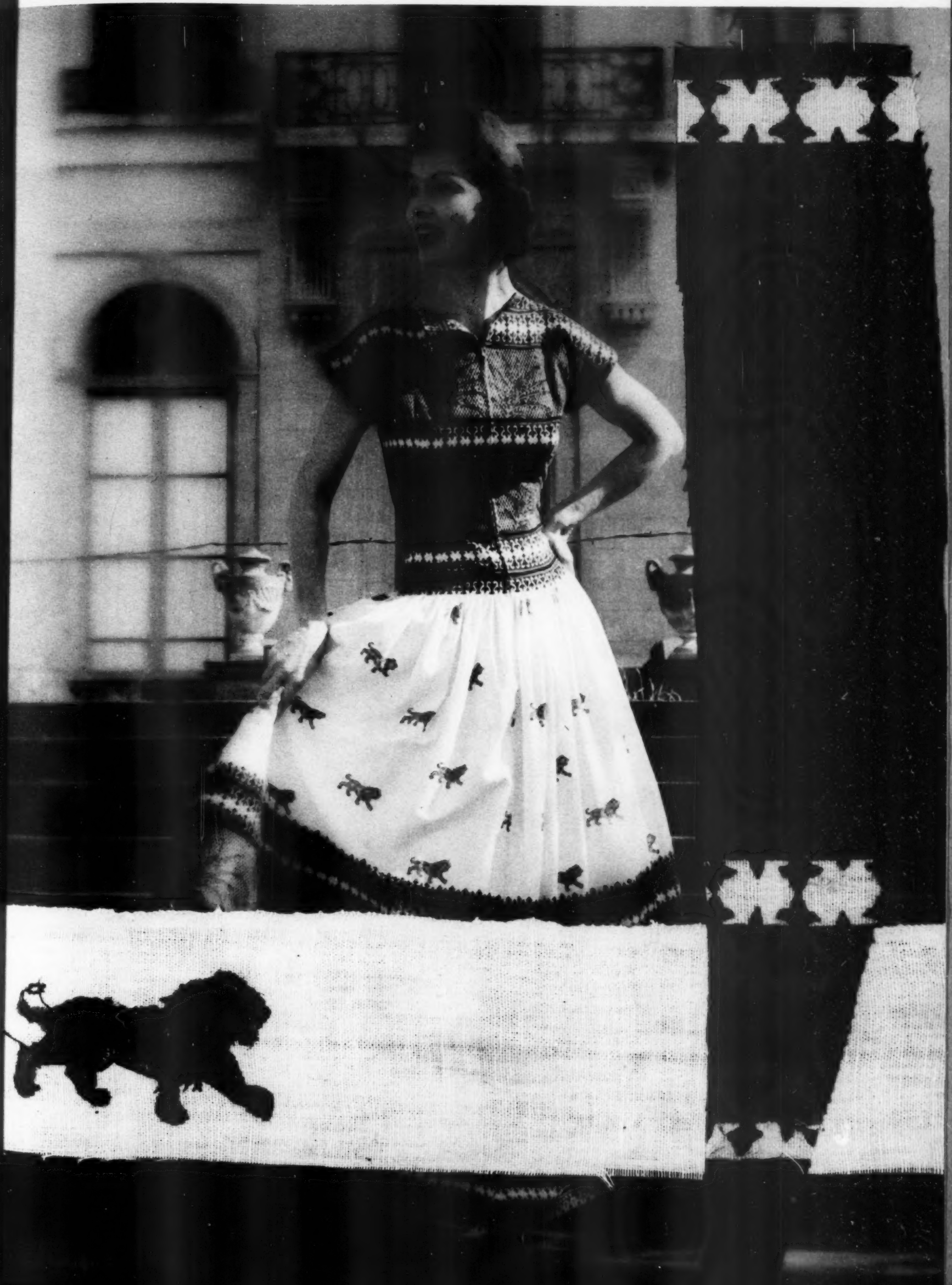
So long as these patrons were men of outstanding culture and sensitivity, the designs that emerged bore evidence of this sensitivity, but as the taste of the master degenerated, the vision of the craftsman dimmed; he lost contact with the sources of his inspiration, which tolerate no corruption. When this happens clarity of form disappears; techniques may improve but the living force that alone gives the technique value dies, leaving a stagnant craft. If the inspiration of the village cloths was a concept of mass and volume, these court fabrics were expressions of an exquisite and highly cultivated knowledge of line.

Village fabrics produced an effect of carving in grey or  
(continued on page 46)

*A handloomed silk sari cloth with motifs in gold or silver, woven to fit the design of this adaptation of the familiar Chinese banker's coat for at-home wear.*

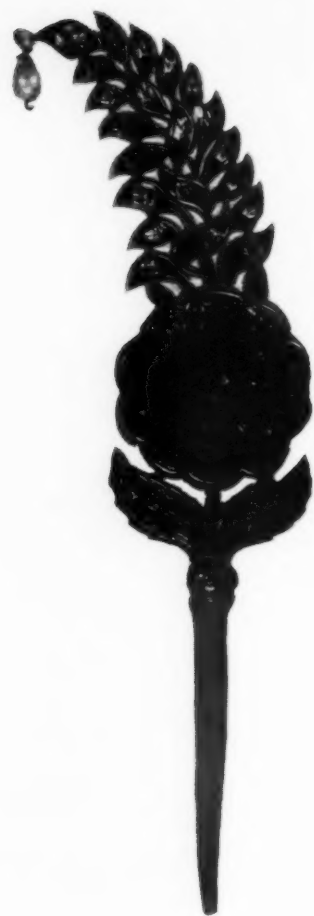


OPPOSITE: Fashion created by Gibson Bayh with handblocked Indian cotton print in banded design of lions.

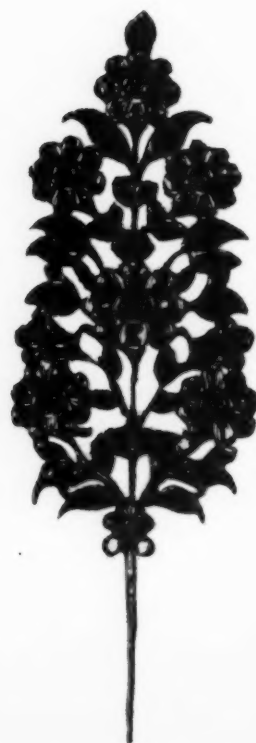




Indian Influences . . . continued

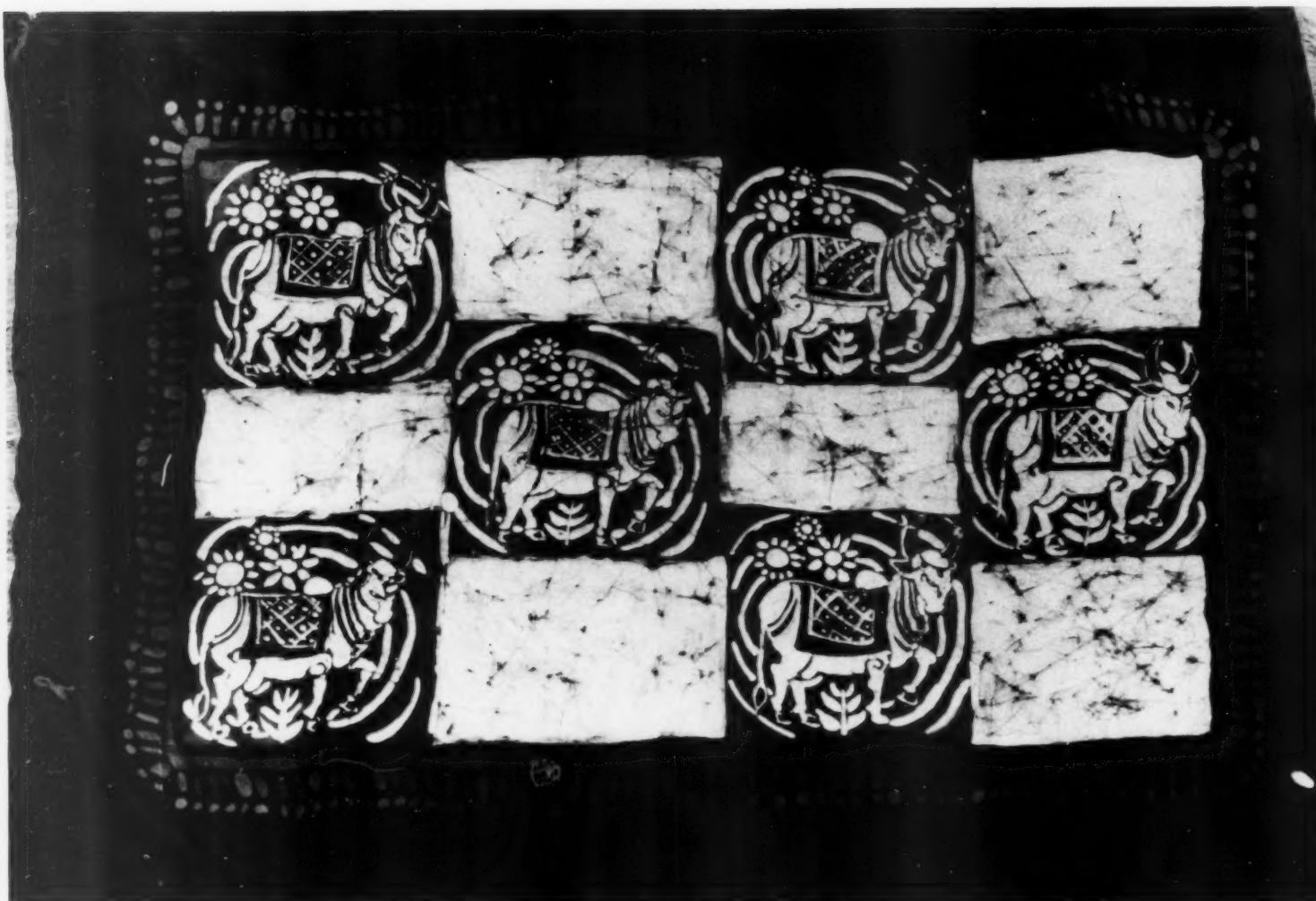


AT LEFT: A hand-embroidered hostess coat from the Vale of Kashmir. OPPOSITE: A custom original in two-toned blue and gold sari from Banaras. ABOVE AND BELOW: Turban ornaments, jade with rubies, emerald and white topaz.









*Contemporary batik-dyed silk cloth from western India in checkerboard design with decoration in the squares based on oxen motif.*



*Photo: L. K. Jha.*

*Chaturmukh Shivlinga, Gupta period. Kotah, Rajasthan.*

## Indian Influences . . . continued

red sandstone where the shadow formed the background and the design was in relief; in the court textiles the effect was of precious stone inlay work in marble. The depth was in the design and the background carved out the pattern.

Trade in Indian textiles has been known from the earliest times. This trade was of such magnitude that whole villages sprang up solely concerned with producing cloths adapted to suit the demands of foreign markets. To this day there are a large group of hereditary craftsmen who work solely to produce weaves, prints and embroideries to satisfy foreign demands. The skill of the Indian craftsman makes it simple for him to adapt his technique to new forms.

The last fifty years has witnessed a rapid transformation in the craft picture in India. The building of roads, the breakdown of caste barriers, the erection of textile mills, the carrying of an urban civilization through the radio and cinema to the door-step of village communities, has led to a disintegration of the norms that directed craft traditions. The introduction of the concept of designer as distinct from the craftsman has destroyed the craftsman's direct response to good form. There has been a recent tendency to revive old designs and patterns, but this has been done with a total

*(please turn)*





ABOVE: Pair of gold armlets from North India, 19th Century, and a silver-gilt foil forehead ornament, set with glass. From the Victoria and Albert Museum, London. BELOW LEFT: Chaddar cloth from Sind. In the Calico Museum of Textiles, Ahmedabad, India. BELOW RIGHT: Stone carving of Laxmi from Barolli in Rajasthan. 9th Century.

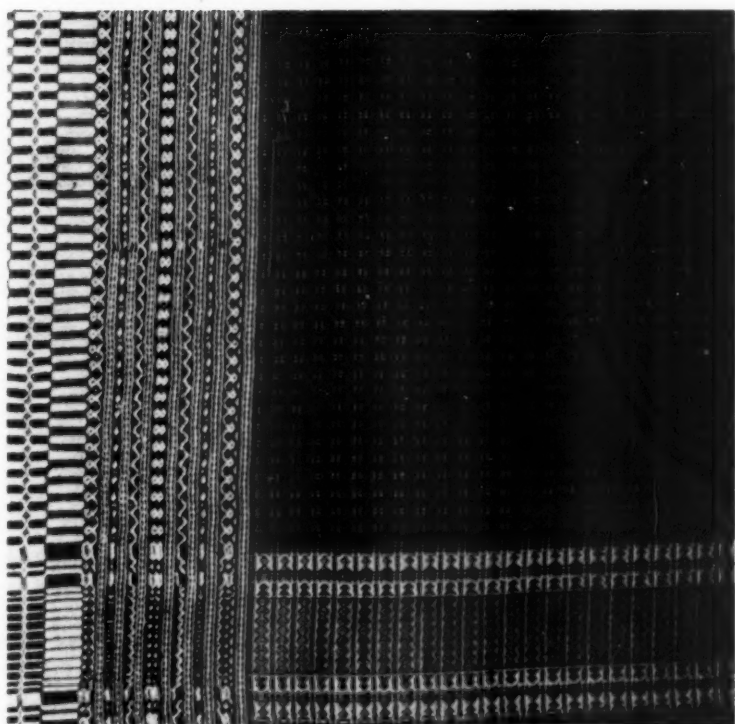


Photo: L. K. Jha.





AT RIGHT: *The horse and the knight errant. A popular folk concept from the ballads of Gujarat, interpreted in a contemporary fabric design.*  
BELOW: *Sati stone, Cutch.*



## Indian Influences . . . concluded

lack of knowledge of materials, forms and usage. No craft tradition can hope to survive by a blind imitation of the past. The past is dead and the conditions that led to the living quality in the craft tradition is lost. To mold form out of the present with all its richness and significance calls for a level of creativity rarely found. It is not through designers pouring out from art schools that we can seek new craft impulses. What then is the answer?

It may well be that the time has come to cease to teach and only to make available, through regional museums, with small travelling units that can move from village to village, the finest samples of craftsmanship both of India and of other countries of the world. Good form and design alone can teach. All that the organizers of the craft movement can do is to help cleanse the eye of the craftsman of the vulgarities and limitations that have blurred his perceptions and limited his sensitivity. It must be left to the eyes of the craftsman to see, to assimilate and then to produce. **END**

Contemporary fabric illustrations courtesy Bombay Government Cottage Industries and The Museum of Modern Art's Textile and Ornamental Arts of India Exhibition. Contemporary fashion illustrations, courtesy Gump's, San Francisco.

# Report on Fashion Fabrics



Reversible Shetland coating of 100% virgin wool. Separately woven fabrics are loosely sewn together to facilitate seam construction in tailoring. By ANGLO FABRICS.



All-cotton, yarn-dyed fabric with textured surface. Crease resistant, it lends itself to misses' apparel for suits and dresses and to men's wear for brightly colored sports shirts. By HERBERT MEYER.



Deep pile coating resembling fur of 65% Orlon and 35% Dynel with woven cotton back for the styling of fur-like garments. Chief features are light weight and soft hand. By SIDNEY BLUMENTHAL.

**Fabric Collections Coordinated for Ensembles.** Big news is the presentation by textile houses of groupings of related fabrics for ensemble styling of garments. Because costume-selling — with jackets over dresses, blouses to match suit linings, and three-quarter coats over town suits — is the predominating merchandising influence today, fabrics have been coordinated in color, weight, and texture. Coordination of texture may mean the use of diametrically opposite surface effects linked by color: a copper and black yarn-dyed tweed coating with a clear-finished suiting weight in copper color, for example. Very important is the monotone color theme which pairs a plush coating with a woven dress or flannel suit fabric in close color harmony. A color can be exploited to provide a range of blending yet contrasting tones for use in a single outfit. Greens and beiges have been developed in this way for costume interpretation.

**A Special Note on Weights.** One factor which makes this season's offerings different from others can be summed up in the words *diversity of weight*. For example, one fabric house has found it advantageous to stress what they call a *costume weight*. This is an in-between weight which can be used either as a light suiting or as a moderately heavy dress fabric. By and large, there are more coating cloths being offered ranging from 15½ oz. to the full coating weight of 20 oz. for fall and winter.

This development toward more gradations in coating, suit and dress weights can be traced to the key position of the costume look in the fashion picture.

**Color Preferences.** As to the specific colors which have found favor, the news stems from several different quarters. Unexpectedly, green commands more attention this year than it has for many seasons. This color story has two parts. One is the blue greens which are important. Blue into green and green into blue, melting together at their meeting points provide shades of teal and turquoise. The other is in the range of medium greens which are inspired by nature's leaf hues.

Blues are prevalent and the significant trend here is that navy as a winter color is gradually moving into the background to allow tones of cobalt, delft, and periwinkle to come to the fore.

Reds continue to be important and the new variety of shades available plays a part in this. In addition to the traditional fireman red, there are many shades of rich pinks all the way to orange. The cherry reds are there amid the gamut of red tones on the market.

Browns and beiges make their mark. Sometimes tinged with pink; at others they favor a bronze or coppery cast. In stock-dye mixtures the beige family is running a close second to the charcoal and grey mixtures which have securely held top place for several years.

Summing up the color story, the crux is that the fashion colors do not stay put on the color wheel but borrow from their neighbors for an unusual array of subtle tones.

(please turn)





Colorful example of the knitted trend is this tweed jersey of 80% Orlon and 20% wool. Completely washable and permanently pleatable, the fabric is suitable for separates. By ALAMAC KNITTING MILLS.



One exponent of the lace look is this wool (60%) and nylon (40%) fabric for formal and informal costumes. Lightweight and packable, it is an excellent fabric for traveling. By AMERICAN SILK MILLS.



This virgin wool coating fabric containing alpaca and mohair has a luminous and iridescent quality, soft and drapable hand. Fabric epitomizes the luxury coating look. By BOTANY MILLS.

**New Colors and Weights for Cashmere and Camel's Hair.** Increased prominence has been given to cashmere and camel's hair because of their availability in such colors as red, green, grey, charcoal and medium blues in addition to the classic tans, browns and navies. In the coming season more than ever, these fabrics are featured in a complete range of weights — dress, suit and coat — for a well-rounded coordination of fabric and color.

**The Sweater Look.** Tremendous impetus was given the American sweater industry by the importation from Italy and France of unusually styled sweaters. Sweaters have been riding into high fashion and this trend has affected woven fabrics.

Because of the furor created by the sweater look, jerseys are holding top priority and are presently in a position to dominate a large segment of the fashion stage. Orlon and Acrilan, used alone or with wool, make top jersey headlines in both the regular and high-bulk yarns. One contender for fashion honors combines Orlon and cashmere in a heather tan jersey.

Jerseys make their mark in color, as well as in yarns used. Foremost are the blackened or charcoal tones sometimes termed ember colors. Red, green, brown, blue or any shade derived from that palette, is blended with charcoal to give the effect of color issuing from a dark ground. Rich brown and black stripes and Italian-inspired ombre effects have taken hold, as have dobbies in white on black.

In men's fashions as in women's, jersey is leading the parade. A case in point is an oxford jersey sports jacket tailored by M. Jackman, who stands among the country's foremost creators of men's wear.

Knitted fabrics are so important that many woven fabrics simulate the knitted surface. Varied end uses will be stressed both for jersey and the woven fabric with the knitted effect. Depending upon the weight used, these fabrics will be found in coats, suits, separates, and used as linings.

The ascendancy of the sweater look will bring the fabric industry into one of the largest jersey years it has ever seen, with no holds barred.

**Precious Fiber Look.** Tremendous impetus has been given to luxury wool coatings with the addition of fur fibers such as rabbit's hair, mink and beaver. The result is fabrics which might be described as a special kind of zibeline. Gently brushed, they gleam with a silky, rich texture which reflects the opulent look. With a less hairy surface, polished broadcloth shines in this category of coatings. In semi- and non-lustrous coatings, plush and velour types are important, especially in a range of black and charcoal mixtures.

**Pile Fabric Look.** Pile fabrics are to be found everywhere and include an enormous variety of coatings. Dynel or Orlon is used alone or in combination on both woven and knitted backs. Resembling furs, these fabrics come in wonderful rich tones such as seal, black and platinum.

Traditional alpaca reappears and is also available in a new blend of 60% alpaca with 40% Acrilan. It is interesting to observe that pile-type coatings will



be given a definitely new look in straighter, slimmer coats replacing the voluminous, wrap-around effect of previous years.

**More on Coatings.** There is yet a third newsworthy grouping in the coating picture. These are the yarn-dyed and cross-dyed tweeds. The yarn-dyed tweeds offer many interesting color combinations that invite coordination with solid-tone fabrics. There are also diamond or herringbone patterns brushed to melt together contrasting colors used. Pure cashmere, for an interesting surface and a soft hand, joins the family in this patterned type of tweed.

**The Homespun Look.** There has been much talk about the rustic effect in a loose open weave resembling a coarse homespun look. In sportswear, this type of fabric is one of the classics and its arrival among town suits, as well as in coats, is limited at the moment to the high fashion houses. These are the manufacturers who, because of their price bracket or their pronounced individuality, set the pace with advanced styling. Whether or not the homespun look will spread in influence depends upon its adoption by the volume cutters.

Tweed textures shape up importantly in the confetti look — white nubs on black backgrounds and colored nubs on muted grey surfaces.

**The Ribbed Look.** One texture to be reckoned with is the ottoman look which is affecting wools as well as silk-like fabrics. Softly brushed wool ottomans are news in coatings and slick bedford cord worsteds equally have importance in suitings. Silk and rayon failles and ribbed fancies of all descriptions make themselves felt fashion-wise with marked diversity in weights and variety in rib-spacing.

A variation of the rib theme in a medium weight wool coating is an effect resembling a bark texture. Equally well described as a random rib, this is a fabric worthy of much attention.

**Corduroy Look.** Another indication of the general trend toward rib fabrics is the acceptance of corduroy. Corduroy is a natural medium for the prevailing slim, elongated silhouette. Manipulated horizontally or vertically, the wale can be employed to lengthen or diminish the overall line to suit diverse figure types. It can be used to advantage for the short or the long-stemmed figure. By contrasting the rib direction much detail of styling can be achieved. For example, the box-type suit makes full use of the versatile rib by utilizing the wale horizontally in the shoulder yoke and narrow hip band and vertically for the jacket body. In the same vein, the ribs can be used for self-trim in the lapels of riding jacket suits or for pocket detail.

Especially style conscious is the wide wale which is being interpreted for travel coats. The corduroy coat is becoming increasingly popular as a travel coat which can take hard wear in trains and planes, can be packed or carried over the arm and successfully double as a raincoat. As a medium weight coat it is especially useful to the traveler encountering various extremes in climate and temperature.

**Velvet Look.** Silicone-treated velvets, as well as velveteens, move on stage with great assurance. Either wholly impermeable or less sensitive to water and with

(please turn)



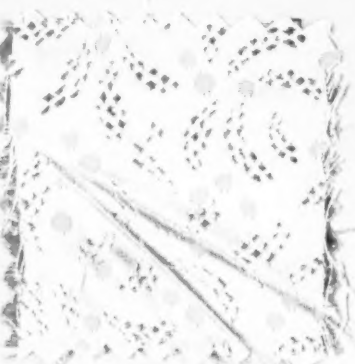
Yarn-dyed woolen tweed with kemp decoration. Rough texture is typical of homespun look. Subtle mixture of tones makes it a foil for ensemble styling of coats with skirts and for dresses of solid colors. By HOCKANUM.



New softly brushed corded coating of 100% virgin wool. 17-17½ oz., it has a light and drapable hand. Adaptable for long or three-quarter coats. By ANGLO FABRICS.



Among the new textures in corduroy is this cheviot effect for wrap-around skirts, raincoats and sports ensembles. By CROMPTON-RICHMOND.



Celanese organzine and rayon yarn-dyed jacquard for the opulent look in cocktail wear and for evening dresses.  
By ONONDAGA SILK COMPANY.



Finely ribbed men's wear fabric of silk (50%), wool (35%) and mohair (15%). Because of its light weight, it is ideal for year-round evening wear, as well as for summer suits.  
By WM. SKINNER & SONS.



Textured cotton which can be washed and worn without ironing. Crease-resistant, it is suitable for dresses, blouses, and sports shirts, and for curtains.  
By CALEY & LORD.

increased abrasion-resistance, velvets and velveteens now span the range from raincoats, sports shirts and skirts to evening wraps and tuxedo jackets. These new and improved test-tube finishes imply a big year for the velvet family. Also this year, velvet is woven with non-tarnishable metallic yarns for evening wear. Printed velveteens have a voice in jumpers and tapered leisure pants.

**The Opulent Look.** A wealth of luxurious formal fabrics echo the opulent trend: radiant satins, crisp peaus, lustrous failles and jacquards in silk, rayon, acetate, and other synthetic fibers. Satins play an outspoken role with many finishes and hands. The gamut runs from the crisp parchment satins to soft and supple satins in different weights. It is reasonable to predict, because of the prevailing trend, that fabrics generally considered exclusively in the realm of evening wear will make their appearance in casual fashions for late afternoon. Satin will gleam in the light of day in over-blouses and soft shirtwaist dresses. Evoking special interest and worthy of mention are the roller-printed satins in floral designs.

Jacquard patterns and brocade types are due for prominent play and, breaking with tradition, have been seen in casual ensembles as well as evening clothes.

The demand for the luxury look has been heard and given its due, calling to the fore a wealth of beautiful rich fabrics for almost any hour of the day or evening.

**Fabric Favorites in Men's Wear.** The accent in men's wear is on the soft hand in suitings and sports jackets. Worsted flannels are in favor but they are the soft, lightly brushed variety resembling woolen flannels. Tweed coatings also follow this trend with herringbone and cobblestone effects predominating. In some cases, a mohair boucle yarn contributes to a stripe or plaid arrangement. Important, too, are the silk and worsted suitings. The response to their supple hand, light weight and excellent performance is such that they are extending their wearing season to become a transitional, as well as summer, favorite.

As to color preferences, the men's field is presently undergoing a state of change. For five years or more the predominating color choice has been for the darker tones. Stemming from the Ivy League, it spread from the colleges and custom tailors to the volume markets. Now under way is the move away from the dark colors to lighter ones. For spring, fabric firms are selling tans, beiges, greens and blues. The Fall 1956 season will find a continuation of this feeling for lighter colors.

Consideration must be given to the popularity of brown and black in small-patterned suitings. The black-brown story is further enhanced by the addition of grey either in yarn-dyed fabrics for sports jackets or in an ensemble of a brown and black suiting with a grey topcoat.

**Spanning the Season with Cotton.** For children's wear and back-to-school clothing, the spotlight can be turned on many beautiful striped and plaid cottons enriched with dobby designs or a satin overlay providing a relief effect. The texture of French knots is achieved by the special use of yarns and is seen in many designer cottons. Playing a stellar role is the re-embroidered cotton highlighting the floral pattern in the fabric. Colors have never been richer nor textures more varied than in the current fall and winter cottons.



# Progress Report on Arnel\*

WITH THE APPEARANCE of each new fiber, yarn companies, converters, dyers, finishers, and manufacturers become increasingly cautious in evaluating them and drawing conclusions. Although there are already some seventy new Arnel fabrics developed by mills who are considering placing them on the market, all those responsible for them are proceeding with the utmost caution to avoid endangering the good name, through premature claims, of what promises to be an excellent fiber.

A close relative of the established fiber, cellulose acetate, Arnel nevertheless has quite different characteristics. This is in part due to the fact that whereas acetate has two acetate components in each molecule, Arnel has three such acetate components. It is, so to speak, cellulose saturated with acetate. The result is that Arnel, in respect of physical properties, is more closely related to some of the newer man-made fibers than acetate.

## A Significant Quality

Most important factor in Arnel is its susceptibility to heat setting. This lends it dimensional stability, gives it dye-fastness by forcing the color down into the fiber, makes it resist wrinkles, and enables it to hold permanent pleats during laundering. This good quality is accompanied by the fact that Arnel can be ironed at the cotton setting without damage, giving much more latitude in care of garments. It has low moisture absorption which makes garments fast drying, hard to crush, and they require little ironing.

It should be remembered that of the fourteen basic desiderata which Celanese Corporation desired to incorporate in this new fiber, only a certain number can be obtained in one fabric, according to construction and type. Each of the fabrics constructed today is being sampled through cooperation with mills, and garments made from these fabrics are

being carefully tested. Any possible improvements discovered are passed on to the mill for further investigation and testing as part of a policy of cooperation between the yarn company and the various mills.

## In the Market

Among the most important fabrics to appear on the market to the present time are:

**FLANNEL** of 70% Arnel, 30% rayon, which takes permanent pleats, is hand washable and will drip-dry. Requires slight touching up with iron. This is being used for shorts and slacks, back-to-school wear and in the children's field. (From Burlington Mills.)

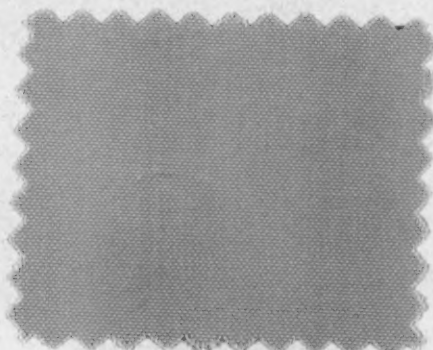
**TWEEDARLIN**, which has 15-denier nylon warp with Arnel filling and rayon nub (77% Arnel, 14% rayon, 9% nylon) mainly for the casual dress trade. Experience of girls wearing pleated garments of this fabric for long spells is that it is extremely easy to care for. (From Burlington Mills.)

**BENGALINE** of all-Arnel warp and Arnel with 35% rayon in the filling. This performs extremely well and resists glazing better than standard bengalines, retaining hand and body, but is not a wash-and-wear fabric. (From Mallinson.)

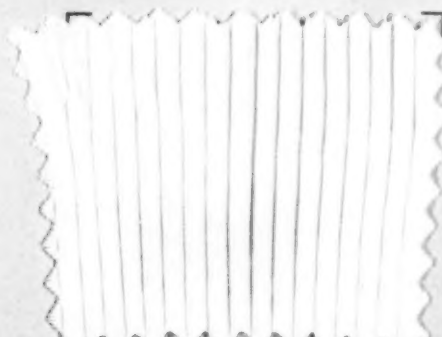
**SAND CREPE** for blouse fabric, which is machine washable, requires only touch-up with the iron. With this fabric there is no glazing problem. This fabric is proving attractive to blouse and dress manufacturers and over the counter orders are strong. (From Cohama.)

**TRICOT LINGERIE** has an interesting market in Arnel, and finishing methods are being evaluated in terms of existing machinery. Shown on this page is a permanently pleated Arnel tricot.

**SHARKSKIN** fabrics—an interesting example is shown on this page, which is used for uniforms and similar garments.



Sharkskin of 100% Arnel which has successfully passed commercial and home laundering tests as well as hospital wear tests over a period of three months. A wash-and-wear fabric by CELANESE CORPORATION.



An all-Arnel, permanently pleated tricot fabric for lingerie, trim and outerwear such as dresses. Pleats are heat-set and washable, and the fabric is dimensionally stable and crease-resistant. By CELANESE CORPORATION.

\*Celanese Corporation's Triacetate fiber.



# Lightweight Luxury

*One of the most basic trends in the direction of apparel fabrics today is toward the use of lighter weight fabrics with undiminished functional values.*



ABOVE: Bonnie Cashin combines leather with Orlegro lining in a great coat with sailor collar and adjustable cuffs.  
BELOW: Emily Wilkens' Mantles 'N Things offers the modern-day mantle in Orlegro with a lining of man-made ocelot.  
LEFT: Blond leather accents the slender Orlegro coat with generous collar, designed by Claire McCardle.





ABOVE: The Orlegro coat tips the scales at 3¾ pounds, just about half the weight of the same style coat made of seal (6¼ lbs.), or mink (6½ lbs.), or beaver (6¾ lbs.).  
AT RIGHT: Orlegro for the teen-ager in a coat with Bishop collar and push-up sleeves.



AS A RESULT OF extensive work aimed at production of pile fabrics of light weight with the classic glamorous look of fur it has been established that a blend of Dynel and Orlon can give optimum results, and several types have appeared on the market.

Orlegro, a product of Princeton Knitting Mills, is a deep pile knitted fabric of approximately 60% Orlon and 40% Dynel that remarkably matches fur in both sheen and luster. Although it is sometimes designated a *man-made fur*, it was not created to compete with fur but to stand as an equal by virtue of its qualities of light weight, soft touch and lustrous appearance. Its light weight, 24 ounces for the yard, is particularly valuable to the designer who must reckon with 32 ounces for any comparable woven goods, and approximately 48 ounces, or twice as much, for sealskin.

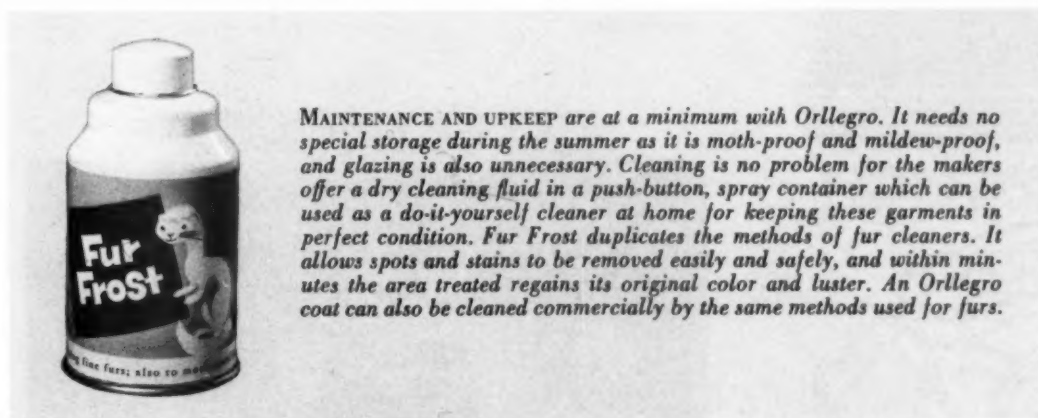
Because of its lightness, Orlegro has good drapability and can be used in quantity without creating a bulky look. An example of this is an evening mantle designed of Orlegro by Emily Wilkens which has sweeping lines that avoid the usual heaviness and bulkiness of fur.

Thus it is not as a substitute for fur but through new design concepts that Orlegro is creating its own

market in high fashion; in this sense, it is standing on its own merits as a new fabric departure. Today it is being styled by some of the foremost designers and manufacturers, just because such fabrics open up new fields. An amazing variety of styles will be seen, ranging from full-flared coats, illustrating supple drapability, to pencil-slim straight lines . . . for both formal and sport occasions. Combinations such as tweed and Orlegro in coat and suit ensembles are now possible, and the variety of designs that drape easily and fall into soft folds, yet weigh little, can be found in skirts, jackets, and at-home wear. There are indications that Orlegro will also be used in accessories such as hats, handbags, and muffs. It will find its way to football games in the form of lap-ropes, and to the park as covers for baby carriages. Further to prove the versatility of this man-made fur, Orlegro is being used as upholstery in cars and on sofas and easy chairs.

Color, which assumes a major role in fashions and home furnishings, plays an important part in the fur fabric field. While the colors now shown are confined to jet black, seal brown, white, platinum, and beige, we are being promised some irresistible pastel hues in the near future.

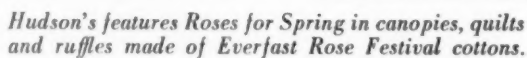
AT RIGHT: Fitted coat of black Orlegro with push-up sleeves, wing collar and frog closing.



MAINTENANCE AND UPKEEP are at a minimum with Orlegro. It needs no special storage during the summer as it is moth-proof and mildew-proof, and glazing is also unnecessary. Cleaning is no problem for the makers offer a dry cleaning fluid in a push-button, spray container which can be used as a do-it-yourself cleaner at home for keeping these garments in perfect condition. Fur Frost duplicates the methods of fur cleaners. It allows spots and stains to be removed easily and safely, and within minutes the area treated regains its original color and luster. An Orlegro coat can also be cleaned commercially by the same methods used for furs.



## A black and white photograph of a floral arrangement. The image is dominated by dark, silhouetted leaves and flowers against a light background. The text "ROSES CARNATIONS" is printed in a large, bold, serif font across the center of the image, partially obscuring the floral details. The overall composition is high-contrast and artistic.



*A magnificent display of Everfast chintz dominates an aisle in Macy's home furnishings department.*





# Apple Blossoms

Everglaze chintz decorative fabric Apple Blossom motif By EVERFAST FABRICS

stores, is a brilliant example of how to sell more fabrics, particularly better quality fabrics. Let us start the story at the beginning, with the Everfast fabric which is designed for piece-goods sale, apparel and decorative purposes. The fabric is guaranteed colorfast and backed by a money-back policy which covers not only the price of the goods, but also the cost of making up a garment. Thus, right from the start the question of consumer confidence is positively answered. (Everfast tests every dye lot that is shipped out and does not rest on the result of the initial test.)

## Appealing Styling a Must

Starting with a colorfast fabric, really good and appealing styling is the next major consideration. Prints are selected for the promotion that will appeal to the widest possible segment of taste to include the sophisticated palate as well as more average taste. A style promotion, rather than a price promotion, is the chief interest of Everfast, since it is more and more apparent that the public, educated to quality and taste, will buy the item that has style appeal despite its higher cost and the present purse tightening.

(please turn)

Apple blossoms are paired with checkmates in a dramatic window display of products for the consumer.



It's almost Spring and MACY'S fancy turns to a new affair of the hearth... **APPLEBLOSSOMS** paired with **CHECKMATES** in endless ways. Come see them in room settings in our 7th Floor Plan-A-Home Row. Look for them in full color in Living For Young Homemakers. The fabrics make a gay, flippant twosome—crocus-crisp chintz and breezy cotton lawn, both by Everfast.



Macy's turns to apple blossoms, as spring scents the air, for coverlets, upholsteries and curtains in Everfast chintz fabrics.





Apple blossom time is the theme for young homemakers in a guest-room display which makes use of Everfast chintz in draperies and quilts.

ROSES

CARNATIONS

apple blossoms . . .

Even the wastepaper basket is covered with chintz in this scheme of decoration themed to Everfast fabrics.



Armed with this guaranteed, well-styled fabric, Everfast begins to plan for the store promotion one year in advance (*this is important*) and enlists the support of top store management, for without such support a promotion usually dies on its feet. Sufficient store and window space, sufficient advertising allotments are required to realize the full impact of a promotion.

#### More Ways to Use a Fabric

From the merchandising point of view, it soon develops that there are more ways to use a print fabric than is ordinarily envisaged. Where a print in its decorative aspects may ordinarily be used for bedspreads and matching draperies, a promotion quite naturally opens up other avenues of use. Closet accessories, wastepaper baskets, hatboxes and so on are just a few additional ways to utilize the fabric. Naturally, the promotion itself encourages a manufacturer to make up items which in average circumstances might not be to his profit. The home furnishing magazines, the store



In the bachelor's room the touches of chintz redeem the austerity of masculine taste.



advertising in the newspapers plus window and interior displays make up the final step to complete the presentation.

Everfast Fabrics can justifiably point with pride to the success of their Rose Festival, Carnation and currently running Apple Blossom Promotions. Executives of the stores that have taken part in these promotions acknowledge that not only has business been stimulated, but they have sold merchandise in price brackets that were not popular before. The stores also found that customers bought a greater volume of correlated items. The promotions proved to be of advantage to the consumer, from another point of view, too; she got every possible help in accessorizing her home.

It all adds up to a successful formula for any progressive organization which recognizes that there is more to selling goods than just producing them. Everfast has proved this postulate for the past few years with a classic, workable example of benefit to all concerned.



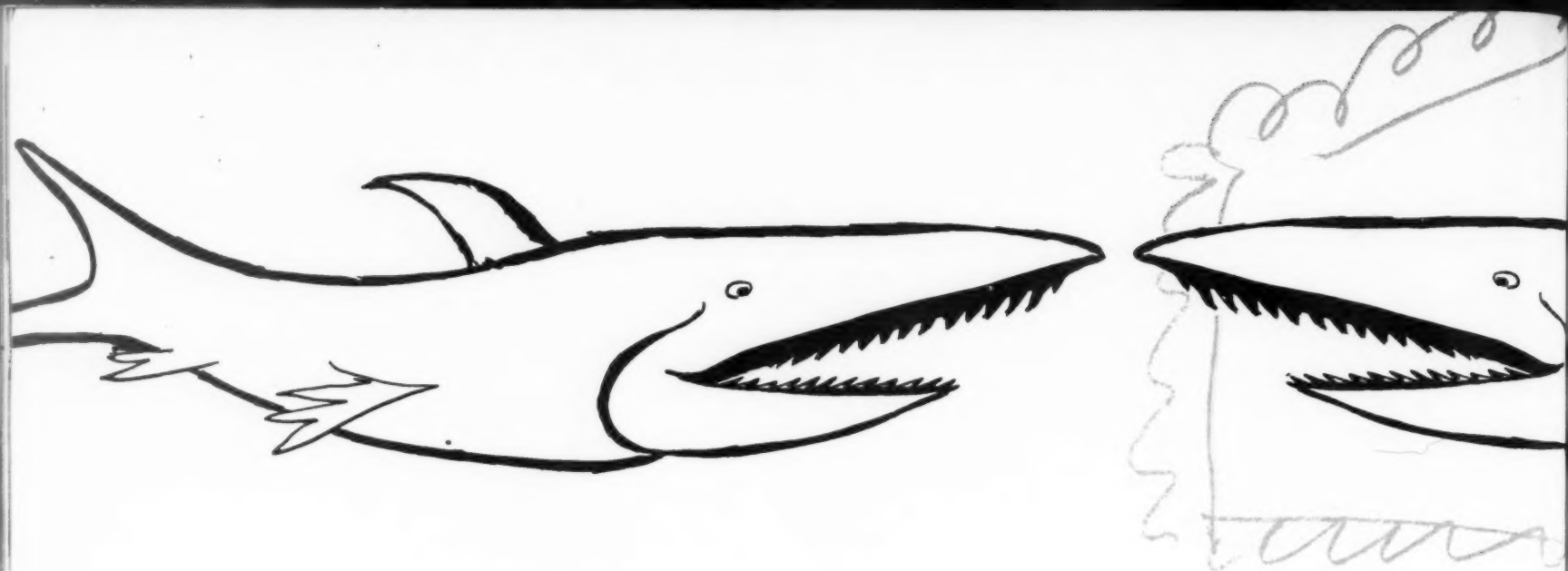
ABOVE: a great variety of decorative elements are able to form happy combinations with the gaily flowered themes of Everfast chintz.

AT RIGHT: At breakfast time the table cloth reflects in blossoms on white linen the spring-morning decor of the living room.

All photos courtesy Macy's New York







## **SHARKSKIN** *shows a new face*



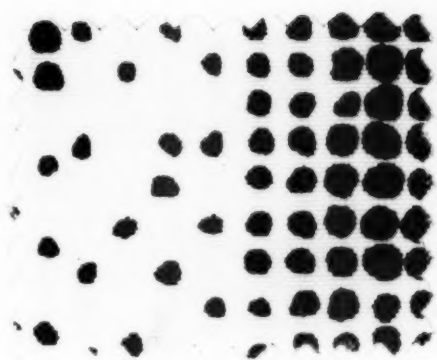
THE PENDULUM OF FASHION preference is swinging slowly from heavy textured surfaces to the sleek, crisp look, a fact which augurs the growing return of acetate sharkskin. The return of this favorite of the last war years was indicated at resorts this winter where sharkskin tennis dresses, bathing suits and afternoon dresses put in an appearance. This summer should see more of the fabric for sport and casual wear, for its crisp, clean look and good tailoring qualities make it ideal for hot weather.

When sharkskin first appeared on the scene it was one of the first crisp acetate fabrics produced, and avidly appropriated for men's suits and slacks and women's sportswear. The close weave, hard wearing qualities and good surface also contributed to its popularity. It was, with rayon crepes and gabardines, one of the first fabrics made of synthetic fibers to reach the volume category.

Sharkskin is making its comeback on the fashion scene in a variety of new guises inspired by a fresh approach and a determination to take advantage of all its many fine qualities. You will see it in brilliant, high fashion colors for the first time. The fabric has a natural affinity for brilliant dyeing which was overlooked in the past in favor of white and pastel shades which are preferred for the beach and tennis court. In these new colors expect to see sharkskin in summer suits and slim coats for which the good tailoring qualities of the fabric are especially adapted. You will see sharkskin in a variety of prints that will go into afternoon dresses and dress and coat combinations. The always popular plaids, flower prints on yellow and beige grounds, splatter prints, and graduated polka dots are all available on sharkskin and suggest many ensembles.

AT LEFT: Acetate sharkskin was chosen for the box jacketed dress with multiple pleats because it holds pleats, stays crisp and fresh looking. BELOW: Sharkskin for a summer evening in a square-necked dress with low placed belt, buttoned to the hem.





Screen-printed sharkskin of 600-denier Celanese acetate for dresses, play ensembles, and misses' fashions.

By MALLINSON FABRICS.



LEFT: Sleek, tailored tennis shirt and shorts in acetate sharkskin, always a favorite for sportswear. RIGHT: A simple sheath of sharkskin, distinguished by button detail at neckline.



AT LEFT: Casual resort dress seen at Castle Harbour Hotel in Bermuda is tailored from crisp, cool acetate sharkskin, dramatically sashed with a leopard print.

ALL PHOTOGRAPHS SHOW GARMENTS MADE FROM CELANESE ACETATE SHARKSKIN

BELOW: A smart day ensemble with extra parts for active sports. Its separate blouse, with red and blue embroidered pocket, may be worn with pleated skirt or with little boy pants trimmed with the same embroidery (right). All made of acetate sharkskin because its fresh look lasts through long hours of wear. AT RIGHT: Sharkskin dress combined with pastel cashmere sweater bound in the sharkskin, designed by David Crystal.







*Textile Wizardry* \*

## **Adds New Dimensions** *to Filaments and Fibers*

THE IDEA FOR CRIMPED yarns arose from the research of a leading carpet manufacturer who was investigating the reason for the great superiority of Indian wools costing about 42¢ a pound over South American wool staple costing approximately 18¢ a pound. Research teams investigating the two types of wool determined that chemically they were identical, but came to the unexpected conclusion that the main difference lay in the crimp, which the Indian wool possessed, the South American wool being almost straight. They were able to prove that the difference in properties between crimped and uncrimped wool was greater than the difference between wool and cotton.

Experiments with crimped fiber showed that the crimp served to give:

Resilience.

Much higher abrasion resistance (as much as 100% increase over continuous straight filament).

Warmth and insulation due to air retained among the crimped fibers.

Improved moisture absorption, which in the case of non-absorbent filament such as nylon and Dacron goes up by as much as 1300%.

Comfort in wear, because crimped fiber does not lay flat and this segregates sweat droplets and maintains porosity. Increased water repellency, which cannot be achieved to the same degree with straight filaments owing to the greater attraction of water for fiber than for air.

Traditional yarn manufacturing techniques are based on the length of fibers found in nature. The machines built for processing fibers into yarns were developed to handle fibers of limited length, roughly from two inches to the length of the longest combing staple. When synthetic fibers began to be produced in continuous filament form the disadvantages of straight filament began to appear. In order to overcome these a most illogical step was taken: the filament was chopped into short lengths, corresponding to natural fiber lengths, so that it could again be processed into continuous yarns on existing conventional machinery.

Only recently, when the value of natural crimp had been scientifically established, was research begun to try to solve the problem of giving continuous filament yarn the properties and advantages of yarns made from natural crimped fibers. As a result of this research, half a dozen varieties of

LINE ——— *New Dimensions • New Possibilities*

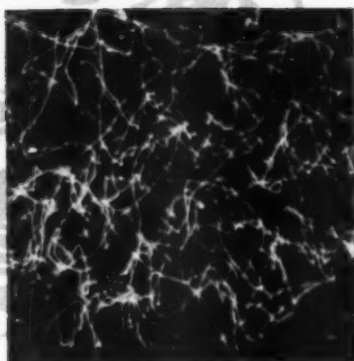


CUBE

*The addition of a new dimension to continuous filament yarns, by changing the filament from a linear to a three-dimensional element, opens up new possibilities based on the combination of filament continuity, lightness and strength with softer texture and coverage, even in the finest yarns.*



*At right: A highly magnified photograph of Ban-Lon yarn showing the crimping of the filaments which adds a new dimension within the yarn's structure and endows it with new properties.*



man-crimped yarns may be found on the market today, of which one of the commercially outstanding types is Ban-Lon.

#### **The Ban-Lon Process**

Ban-Lon is a continuous filament crimped yarn, produced by a process which can be applied, with variations in technique, to any known fiber. The process at present is being used principally with the thermoplastic man-made fibers.

Among the special advantages obtained in Ban-Lon yarns are the following:

1. Although Ban-Lon has the hand and character of yarn spun on the woolen system, because there are no free fiber ends no pilling takes place.
2. Because the fibers on the yarn are not broken but continuous, no twist is needed in the finest yarns to give strength. This means that yarns can be run as singles in knits, or if in ply need be twisted only as much as required for the type of fabric in view.
3. Knitted fabrics made of these crimped yarns are so elastic that they return exactly to shape and do not suffer distortion through wear or washing. That is, there is inherent stability.

4. Strong but extremely lightweight fabrics can be knitted because the coverage of crimped yarn, weight for weight, is high. A sweater of Ban-Lon nylon yarn weighs 40% less than a worsted spun nylon yarn sweater of equal cover and hand.
5. The stability of this type of yarn opens up a new field in knitwear since light summer weights and fancy knitwear types do not tend to sit out.

The overall outcome of the use of these yarns is to give fabrics of equal performance at lighter and lighter weights, in which the wear factors of non-pilling and increased abrasion resistance are extremely important.

#### **Ban-Lon in Tricots**

In tricots, normally run at a speed of 1000 to 1500 courses a minute, the advantage of speed is partially offset by the weight of yarn required in the fabric. Because of the high coverage and bulking of Ban-Lon yarns, an equal tricot coverage may be obtained with a 75 to 80% reduction in weight, with corresponding cost advantages.

The fact that fabrics may now be knitted as tricots and finished as spun yarn fabrics is extremely important, for it

*(please turn)*

### **Ban-Lon's crimping adds these Properties to Filaments and Fibers:**

- |                                       |   |
|---------------------------------------|---|
| <i>Looks improve with washing</i>     | • <i>Fashionable appearance, flattering fit</i> |
| <i>Pilling reduced to a minimum</i>   | • <i>Easy, comfortable stretch</i>              |
| <i>Soft textured smoothness</i>       | • <i>Never shrink or pull out of shape</i>      |
| <i>Remarkable moisture absorption</i> | • <i>Wash easily, dry quickly</i>               |



## New Dimension... continued

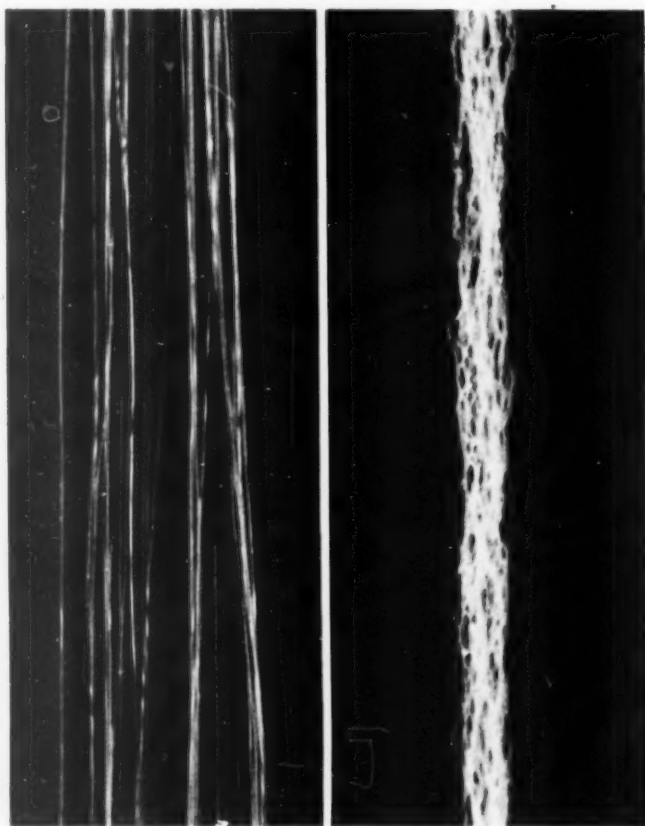
places tricots for the first time in direct competition with lightweight woven fabrics. Another advantage lies in the fact that with regular yarns, as the weight goes down the cost of spinning goes up proportionately, but with Ban-Lon yarns it is possible to obtain economically fine yarns of spun character in 30, 40 and 50 denier, giving effects almost unavailable in regular spun yarns.

### Ban-Lon in Woven Fabrics

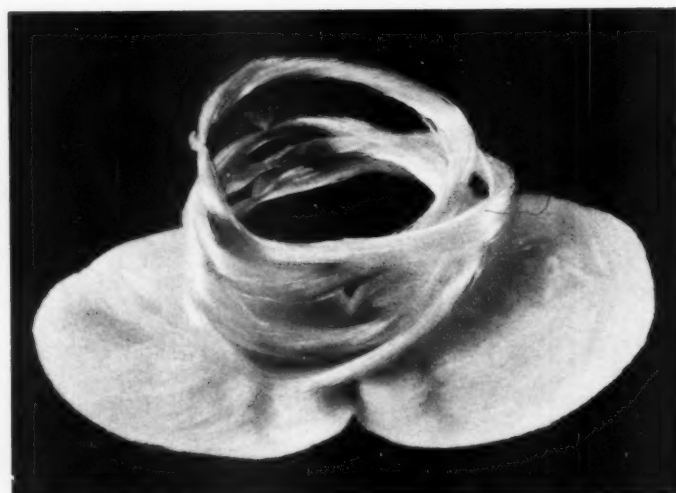
A further advantage is that warps of high mileage can be obtained in, for example, 15-denier monofilaments. It will be appreciated that with regard to warps of crimped monofilaments substantially less pickage to prevent slippage of filling is required, and this makes for considerable cost economy in such fabrics as shirtings, where the lighter weight in keeping with fashion trends, is supported by absence of pilling, high abrasion resistance and stability.

In woven fabrics the use of crimped filament yarns leads to special light weight advantages. For example, it is possible to weave a two-ounce raincoat fabric with Ban-Lon warp and filling to make a raincoat that will weigh no more than half a pound, thus placing it directly in competition, in respect to portability and convenience, with plastic slickers.

Owing to technical simplicity in the general nature of the production process, Ban-Lon is placed in a position to offer high output and cost economies in yarn manufacture. It is, therefore, to be expected that this development will, in the near future, open up new fields in several categories of apparel fabrics and that the contribution of new methods to the aspects of weight, stability and wear will prove to be of far-reaching importance to the leadership of the American textile industry.



AT LEFT: A nylon filament yarn with the fibers spread out to show straightness before crimping. AT RIGHT: The same nylon filament yarn after the crimping process is now Ban-Lon yarn.

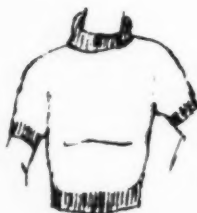


## The Crimping makes the Difference

The crimping and texturing of the yarn adds softness and bulk, as is shown in the picture above. The coiled skein of nylon yarn on top is exactly the same in length and number of filaments as the soft white mass of crimped Ban-Lon yarn below. From this change come stability and elasticity, softness with strength, pliability with abrasion resistance, coverage with light weight.

### Some of the uses of Ban-Lon yarns and the reasons for their use...

**Gloves**... fit snugly, wear easily and have increased moisture absorption.



**Sweaters**... are more free from pilling and have a new, more subtle cling due to the yarn's resilience. They also wash easily and dry quickly.

**Sport Shirts**... are light yet sturdy, absorb moisture but resist wrinkling, have a texture which improves with washings.



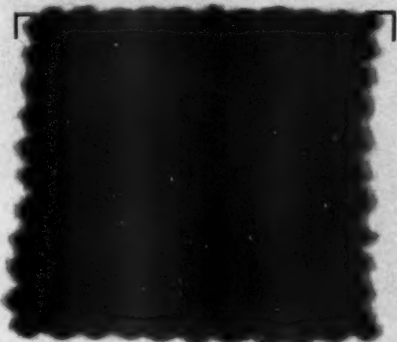
**Socks**... have increased abrasion resistance and stay up without help of elasticized tops, are softer and more absorbent, give readily with the foot's movement.

**Shorts**... have better coverage with lighter weight, fit more snugly and resist shrinking from repeated launderings.



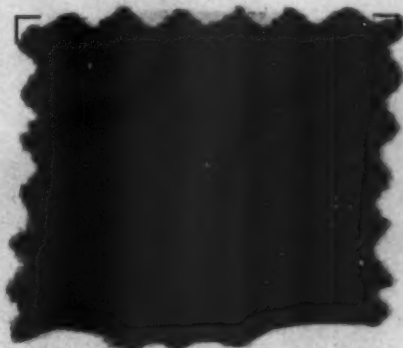


*The use of Ban-Lon yarn in the manufacture of sports shirts and sweaters adds the qualities of soft hand, lightness and coverage with little pilling.*



◆ Fine-gauge, 2-ply 70-denier BAN-LON interlock used in the body of Pandora sweaters and good for sports shirts, etc.

◆ A BAN-LON circular knit, sixteen cut jersey cloth suitable for sweaters, knit dresses, sports shirts and similar end uses.



*Ban-Lon's water absorption characteristics are responsible for an unusual degree of comfort in wearing apparel such as gloves and hosiery.*







For a Walk

in the Rain

This is the first time in umbrella history that a metallic yarn has been used in umbrella fabric, and this Chromspun and metallic Lamé fabric is water-repellent, sunfast, and does not tarnish.

By OLYMPIA FABRICS.



*From Olympia Fabrics*

## Jacquards...do the signs point to a revival?

The trend toward opulence, continually gaining momentum in many quarters, raises the question: is a new and more widespread interest in jacquard fabrics developing?

Among brocade types are those presently making a gleaming imprint on cocktail fashions and extravagant evening apparel. The theater coat interpreted in brocade has its special dramatic appeal. For town wear, the new tunic suits are being featured, for example, with a rayon brocade jacket combined with a faille skirt. Over-blouses glow beneath tailored dark wool suits. These are some of the styles in the current collections which reflect a renewed interest in brocades for women's fashions. The cycle of jacquard linings in fur coats is beginning again, and this time the swing of the wheel finds them in synthetic fleece coats as well as fur. Elasticized jacquard fabrics are finding their way into bathing suits; and girdles, corsets and bras are again being made in brocade-types of synthetic fibers.

In men's fashions, the new and more varied jacquard fabrics could easily move through the gay-colored weskit to the brocade weskit and smoking jacket.

### Contributing Factors

The apparent swing in the direction of jacquards can be connected with several causes. There is the new ground broken by the increasing variety of fast colors constantly being improved and pioneered. Synthetic yarns in a variety of fibers used alone or in combination with silk, cotton or wool permit a wide range in quality and price. Jacquard fabrics highlighted with man-made fibers possess all their traditional elegance while remaining in a price bracket to the taste of an ever increasing number of consumers.

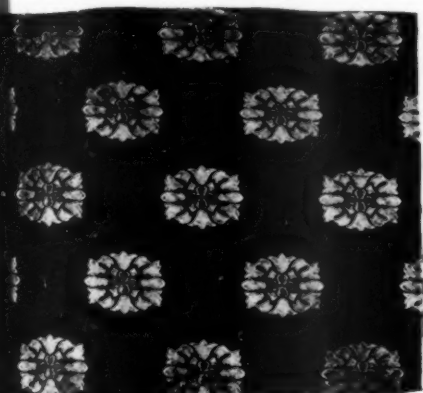
It is significant, too, in this connection that the Fabric Development and Merchandising Department of the Celanese Corporation has been cooperating closely with weavers to create fabrics utilizing the full potential of color and performance of Celanese acetate and Celaperm. And it was recently reported that the noted fabric designer Miki Sekers of the West Cumberland Mills in England featured many jacquard fabrics with petit point surface effects in his collection designed for the Chemstrand Corporation. These are the designs worked out in Acrilan with silk and acetate, rayon and nylon for Chemstrand's mill customers.

Another important factor is the diversity inherent in jacquard constructions. Some of the many effects which can be achieved are demure dobby types, extravagant florals, tailored stripe patterns, spaced traditional and modern all-over designs. The texture can be completely lustrous, dull contrasting with luster, or lusterless. The surface can be raised as in a matelassé, or without any relief effect. For apparel designers, interior decorators, and industrial designers, jacquard patterns and textures furnish a wide scope for many end uses.

Everywhere one hears the opulent story and the textile industry is responding with the classic jacquard construction. The probable reappearance in force of brocades would seem to fulfill a growing demand for luxury fabrics affecting many phases of modern living.



*From Portrait Fabrics*



*From Chelsea Weaving*

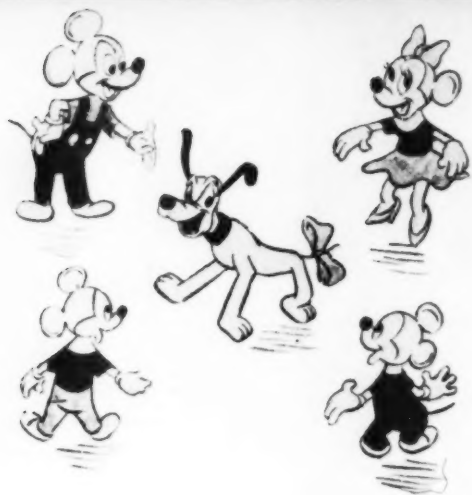


*From D. Strauss*

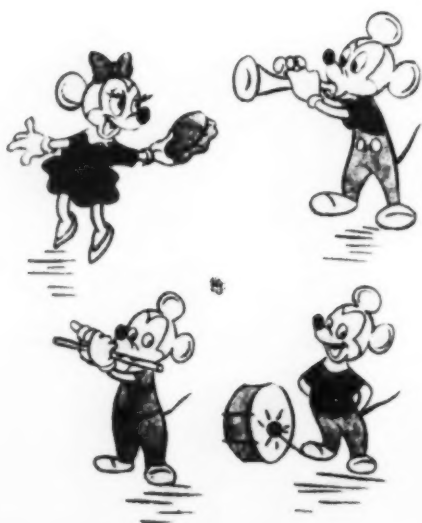
*From D. Strauss*







Woven fabric of 100% nylon, roller printed with Walt Disney's Peter Pan and Tinker Bell motif, for children's dresses, lingerie, negligees and robes. By TRAVIS FABRICS.







## *Fabric Provides a New Field of Adventure for Walt Disney Characters*

THE WARM AND APPEALING Walt Disney characters, made world famous in movies, in television and on the printed page, have now been sympathetically translated into roller prints by Travis Fabrics. Tinker Bell, Peter Pan, Snow White, and all the people to whom Walt Disney has given substance and life have retained their identity in print fabrics with added design appeal. The bold cartoon figures have been softened with a delicate rendering in near-pastels, such as lavender and grey, pink and blue, enriched by an elaboration of appropriate design motifs. In one print Cinderella poses with a casual arrangement of pumpkins and romantic castles. For another theme, the figure of Snow White alternates with the form of a graceful deer in an undulating horizontal stripe effect softened with sprigs of flowers. In another print, Peter Pan and Tinker Bell cavort and fly together in fairy-fashion, among wreath-like scrolls.

Practically the whole library of Disney animations is present in various prints. Donald Duck and his family make merry with musical instruments. Mickey and Minnie Mouse, accompanied by nephews and by the inimitable Pluto, frolic

in yet another print. The distinctive feature of this grouping of fabrics is a delicacy of interpretation which, at the same time, maintains the alive and buoyant quality associated with the Disney characters.

The prints are available on synthetic fabrics, for the most part, including puckered and sheer nylons, nylon crepe and tricot, acetate taffetas and satins. It is intended that this first collection should inaugurate a long-term program because with each successive season any new cartoon figures that Disney may create will be added to the already existing line of fabric designs.

As a design idea offered to all branches of the cutting-up industry, its appeal extends from the children's wear field, for dresses, shirts and jumpers, to the misses' and women's field for robes and blouses.

In its conception and development, the fabric prints inspired by the Disney characters give validity to the premise that a sensitive appreciation of the design source can prove a sound foundation for an effective commercial enterprise.





*For promotions within the store, in which such firms as Bates Fabrics have done an outstanding job, model rooms set up along the selling aisle accessorized with all the campus paraphernalia have proved helpful in increasing sales. All the glamour of college days comes immediately to life for the new student. The model rooms help her visualize color and suggest ideas for furniture arrangement which she may later*

*incorporate. It inspires her to wish to have the most attractive room on campus to which other girls will come to share bull sessions and study periods. It also adds prestige when students from accredited schools are on hand to assist in customer selection. An added feature is a checklist of furnishings she will require for her new campus home posted in a prominent place, which will ensure that no essential is overlooked.*





## *Retailing to the Colleges...*

*a continuing Bedspread and Drapery market*

IT IS A FACT that the college girl will go to great lengths to make her dormitory room attractive, and that two of the most important ingredients in the transformation are bedspreads and draperies. If the windows are not regulation size she will cut up a bedspread and make matching curtains. She will buy an extra pair of draperies to upholster an easy chair in the same fabric as her bedspread. Such an enthusiastic consumer is deserving of the best in styling and diversity of selection. Much has been done to keep pace with the eagerness of the college girl, and this market, because of its very nature, can never be a static one.

In the back-to-school selling season, these items represent a lion's slice of business and they merit some thoughtful exploration. What is the best timing for such fall promotions? Are there untapped potentials in the styling of bedspreads and draperies? What are the students' tastes and buying habits?

In plotting promotions, the city store problem is different from that of either the small city or campus town. The department store in the large city, such as Boston or New York where universities are located, will do well to await the arrival of students in September. The store located in the smaller city, aiming to equip the student before she leaves home, makes August the target. The college town, on the other hand, has an entirely different operation and must stock and promote its merchandise according to the existing buying pattern of its locality.

### **Lengthening the Selling Season**

An interview with a bedspread buyer of a large New York department store brought forth some interesting observations and recommendations. To lengthen the already short selling season of the city store, this buyer offered a golden nugget of a suggestion: to send a mobile unit to nearby colleges — a trailer carrying not only bedspreads but the latest in lounge and study clothes as well. Against the backdrop of a bedroom setting, show the newest fashions in clothes and bedspreads simultaneously. This would bring the opportunity of selection directly to the student with a special dramatic impact.

In the area of styling it is necessary to take into account that a student's taste changes during the course of a college career. For example, a freshman tends toward conformity and the simple classics in bedspreads and draperies are apt to be the rule. She returns for her sophomore year with different views and preferences. Progressively she grows toward a more individual expression as to color and style. In many cases, her taste tends toward more femininity. By the time she is a senior she may want flowery chintz instead of tailored denim. However the fact may be, and it varies with college communities, more varied styling aimed at the different age levels is a merchandising factor to be weighed.

The men students present another untapped potential. The

fraternity or dormitory room is as important to the boy as to the girl. Why does nobody design bedspread and drapery sets especially for masculine tastes? Merchandising could be directed toward arousing his interest in choosing and buying his own instead of having some member of his family make the necessary purchases. If a bid were made to capture his interest and designs existed especially for him, it would be an investment that would pay off. Promotions might be aimed at the fraternities with an overall color coordination worked out in several patterns.

It is an interesting sidelight that the teen-agers are an important buying group in the collegiate bedspread market. Looking forward to the time when they too will go away to school, they are desirous of imitating their older friends and sisters. Since this age group accounts for many sales, consideration could be profitably directed toward the younger customer in styling a line.

### **Color Influences**

As to the very important factor of color preferences, it has been reasonably established that the college girl is greatly influenced by what is offered in the apparel field. Automatically she absorbs the colors featured in fashion magazines and promoted in store ads. When she turns toward selecting room furnishings, she will choose the colors that have been in vogue. It has been estimated that the color trend in bedspreads follows the ready-to-wear market by about six months.

Several years ago the color trend was toward strong hues such as pure reds and greens. Now, as in the apparel field, the mid-tones and fused colors are in favor. Pastels are in the ascendant and are expected to become more prominent. Since the prevailing influence in current fashions is that of India and the Orient, it may be that this trend will also affect the bedspread market.

END





Paul B. Rubenstein  
President of  
Security Mills, Inc.



## THE CLEAN FLOOR

*...textile mill organization  
for tomorrow*

THE PEOPLE RESPONSIBLE for the oldest segment of the textile industry in America, the New England mills, have seen many changes and have passed through good times and hard times with the rest. If anyone doubts this, or believes that this historic area is, industrially speaking, a part of yesterday, a visit to such a New England mill as that of Security Mills, Inc. at Newtonville, Mass. will dispel their doubts and place their thinking on a firm footing.

The Security Mills operation, with plants at Newtonville and Yantic, Conn., is in many ways a typical family business, in the management of which the younger generation began to take a more active part some few years ago. The Newtonville mill, having started with knitting, developed into a completely contained plant with dyeing and finishing facilities for all types of woolen fabrics. The Yantic Woolen Mills, Inc., at Yantic, Conn., was acquired in 1941 to serve primarily as an additional source of supply of woolen yarns for the Newton knitting. In addition, the Yantic mill had a self-contained weaving section with equipment necessary to complete the dyeing and finishing of its own production.

In 1953 it was decided to take the Newtonville mill as an experiment and to plot improvements on a blueprint of the operation with the idea of entirely replanning it, if necessary. On the basis of results there, changes would be extended to the rest of the operation.

Basic to the new ideas to be incorporated in the blueprint was what might be termed the engineering approach. As Paul B. Rubenstein, president of Security Mills, said, "It is surely no secret that new machinery will produce higher quality materials more cheaply than ever before. Nor should it be any secret that informed management, through the use of manufacturing controls, can guarantee the production of quality goods and establish a reputation based on quality."

The key to Security's new program was modernization, not only physical but also mental. The time at which this new program was conceived was one of great stress in New England's textile industry, when companies were in a state of liquidations, mergers, combinations and relocations, all taking place with startling rapidity. In spite of this unfavorable climate, the management of Security Mills believed in the return of prosperity — and on its own terms. Placed in charge of this new program was the competent team of John B. Rubenstein, Vice President, who is in charge of all purchasing and production, and Martin J. McDonald, General Manager, in charge of the operations of the mills. It was their job to follow through on the complete modernization plan



*At Newtonville, Mass., three stages in the clean floor policy...*

and to supervise its completion at the lowest cost and without interrupting existing work. Their task, which is now finished, was destined to take eighteen months.

To prepare the way, it was decided to consolidate all the knitting operations under a single roof, so that the weaving, with its own dyeing and finishing, would be kept at Yantic, and all the knitting with its corresponding dyeing and finishing would be located at Newtonville. This included the separation of spring needle machines making certain types of fabric from latch needle machines making other types.

This was the first decision in the adoption of what may be described as a clean-floor policy, aimed at the ultimate lowering of costs.

### Reorganizing for the Clean Floor

What is the clean-floor policy? It consists of a complete reorganization of the work flow, to obtain the greatest amount of production with the least amount of effort; the building of a unified and consolidated knitting, dyeing and finishing operation; and the use wherever possible of specialized cost and labor saving machinery. It includes scientific methods of control throughout, both in respect to quality and flow.

This policy must start literally from the floor up, and involves scrupulous cleanliness of every working area. It also includes the careful, daily analysis of every segment of output in such a way as to pinpoint every variation from standard whether arising from material, machinery or the operators themselves.

The clean-floor approach also acknowledges responsibility of management for building a team and spreading the team spirit throughout the whole operating staff. It includes responsibility for new styling ideas, vital to the building of a line, for achieving new fabrics which will inspire new applications, and for merchandising ideas and policies which will be of assistance to the garment manufacturer and provide assurance to the consumer.

It involves the application of new ways of obtaining information on which to base decisions. An example of this is the use of IBM cards for order and job tickets, so that in-

*The plant of Security Mills  
at Newtonville, Mass.*





... AT LEFT: In December 1953 before reorganization; CENTER: The clean floor, February 1954; RIGHT: The same space in production today.

ventory analysis, production analysis and defect analysis can be easily undertaken, rapidly executed, and new facts aligned with top efficiency. This step is one of the pioneer attempts to control quality in a small textile mill with IBM Electric Accounting Machines.

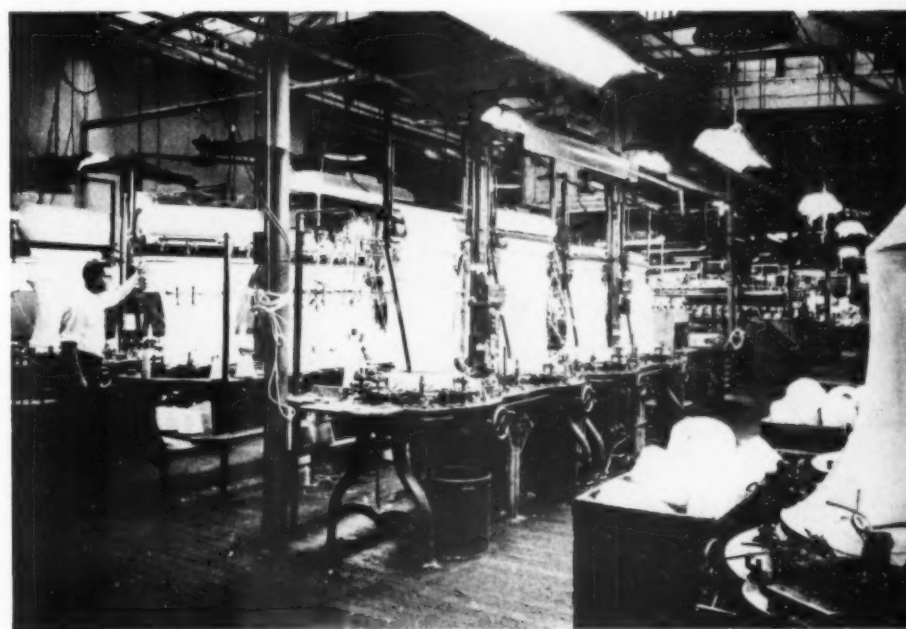
It also involves the study of merchandising areas with the aim of finding in different markets the possibility of leveling out production pressures and peak periods. These exist in the apparel industry and markets in other applications such as the shoe, electrical, theatrical, and decorating fields, where peak periods of fabric consumption are not coincident with those in the apparel field.

#### An Even Work Flow

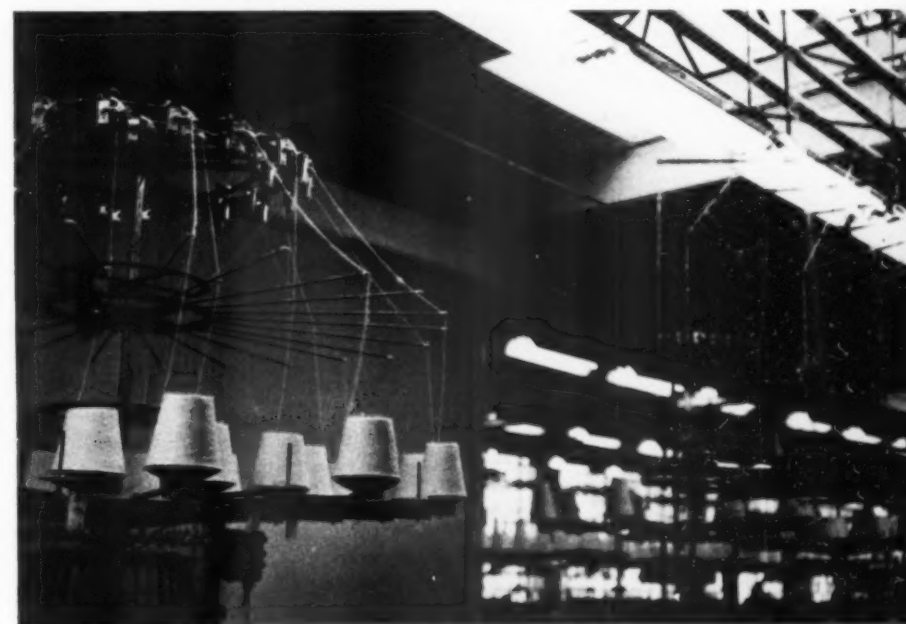
Under the new plans the general arrangement of the Newtonville operation is based on time intervals. The knit goods, coming from the spring needle and latch needle machines grouped at either end of the building, meet in the center in the grey goods area. There they are turned, inspected and measured in a single operation by a specially devised machine operated by one man. The goods are also weighed here, then stockpiled for future processing. From this point they pass to the processing section of the mill, where they flow down one side of the building and return along the other to the shipping area. Lines of production flowing through each processing and finishing section are so laid out that lightweight fabrics such as worsted jersey, and heavy fabrics like women's coatings, never meet or cross until the cloth reaches the shipping department.

All these operations are controlled by a laboratory where all necessary chemical and physical analyses take place. Here, incoming materials, new products, and established formulae are tested and records kept. The laboratory also serves to find facts on which correct management decisions can be made.

The special viewpoint or philosophy on which any commercial undertaking is based can only be evaluated in terms of the company's operating record. Therefore when it is learned that shortly after the clean-floor policy began to take practical effect, Security adopted a round-the-clock operation which has now been in force continuously for the last eighteen months, there is a strong indication that there is something in the company's business philosophy. It is this kind of thinking and integration more than any other, perhaps, that can place New England, which lies so close to the great markets of the garment industry, once again in the forefront of prosperity.



ABOVE: Bad lighting and crowding characterize old floor arrangement, while today, below, cleanliness and ample working space exist.







*Mattress ticking on walls, in draperies, and as upholstery for chairs and sofas makes a vital contribution to a room of elegance.*

## Mattress Ticking comes to light...as a new Decorative Fabric

*Mattress ticking, long confined to pedestrian uses and considered dramatic only by theatrical designers, is endowed with new glamour by decorator Guy Roop who has cleverly used it for a complete scheme of interior decoration.*







ABOVE: Interior designer Guy Roop. AT RIGHT: Wall covering of mattress ticking makes a distinguished background for the French Empire bedroom with blue silk satin canopy lined in blue and white pin-striped cotton.

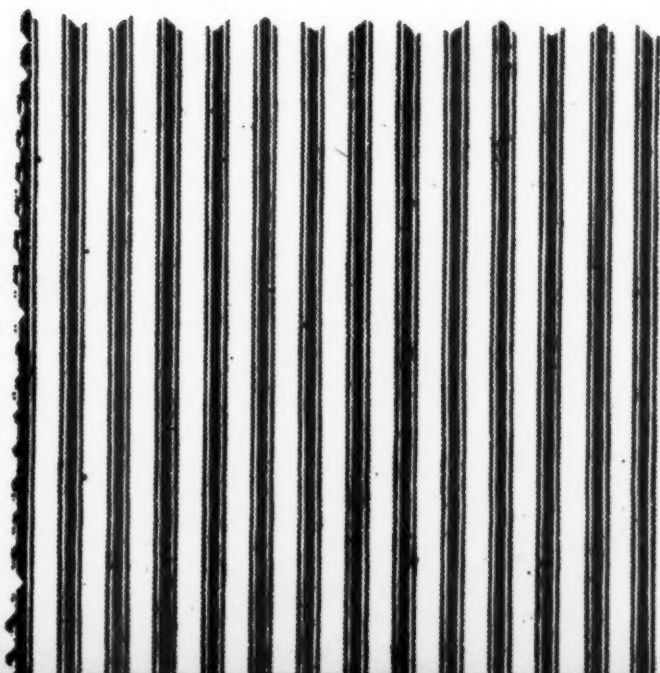


MANY FABRICS ARE designed for a particular purpose or, because of certain outstanding qualities, naturally gravitate to certain end uses. We become so accustomed to thinking of these fabrics in one context that their possibilities in other applications are overlooked.

We don't have to look far for examples of this kind of inflexibility. Cotton was consigned to the kitchen; corduroy was strictly in the work clothes category; khaki went to war or work, until a fresh eye saw fashion potentialities in addition to purely utilitarian functions. Today, cotton is polished and patterned to go to the ball, corduroy and khaki are at the fashionable resorts.

Guy Roop, interior designer, is currently working the same transformation for one of our most pedestrian fabrics . . . mattress ticking. Valuing its modest price, its durability, its imperviousness to sun-fading and ease of cleaning, Roop believed here was a fabric that could not only fill many more functions but that was designed well enough to come out into the open and be seen. He used it first to camouflage architectural defects inexpensively and the effect of using the ticking on a large scale, such as for ceiling-to-floor wall covering, was breath-takingly elegant. From this beginning, Roop went on to use the fabric in other rooms of his apartment and for many of his clients.

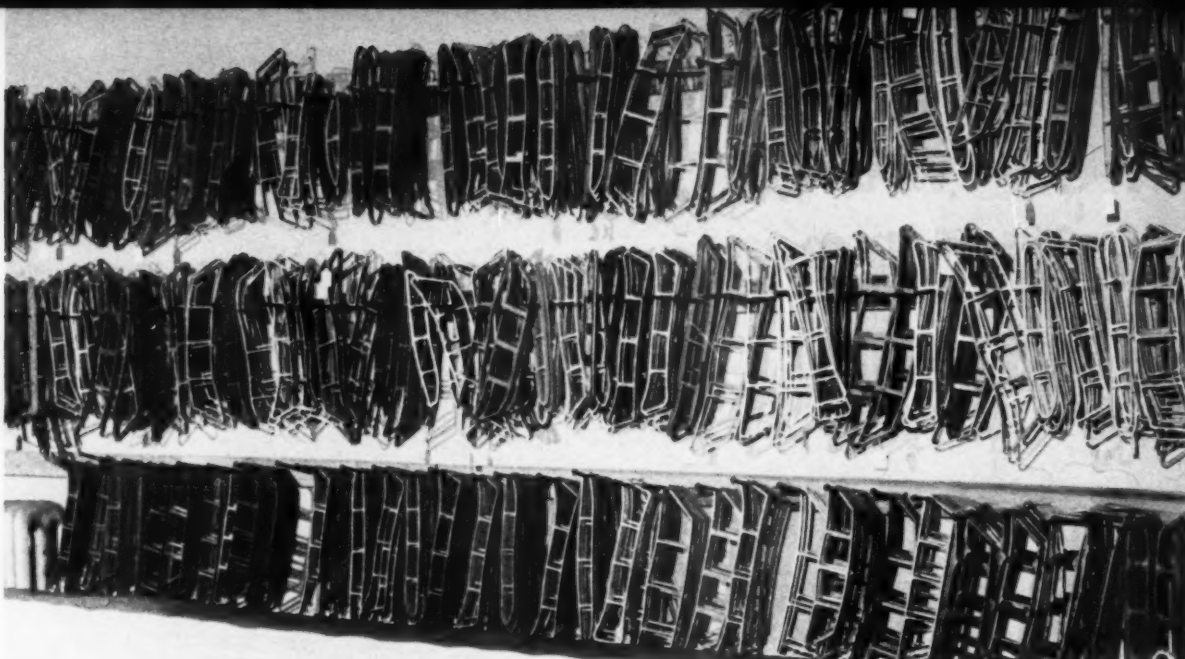
The room on the opposite page (Guy Roop's own apartment) illustrates what an excellent background mattress ticking wall covering provides, in this case for paintings done after the style of David Teniers' drawings depicting the daily life of the peasant during the 17th century. The elegant couches are also covered with mattress ticking, trimmed with black braid and used over skirts of Belgian black linen. In the Round Hill Hotel in Jamaica, Roop used mattress ticking widely to achieve a quite different effect, one that is suitable for the casual living at a beach resort.



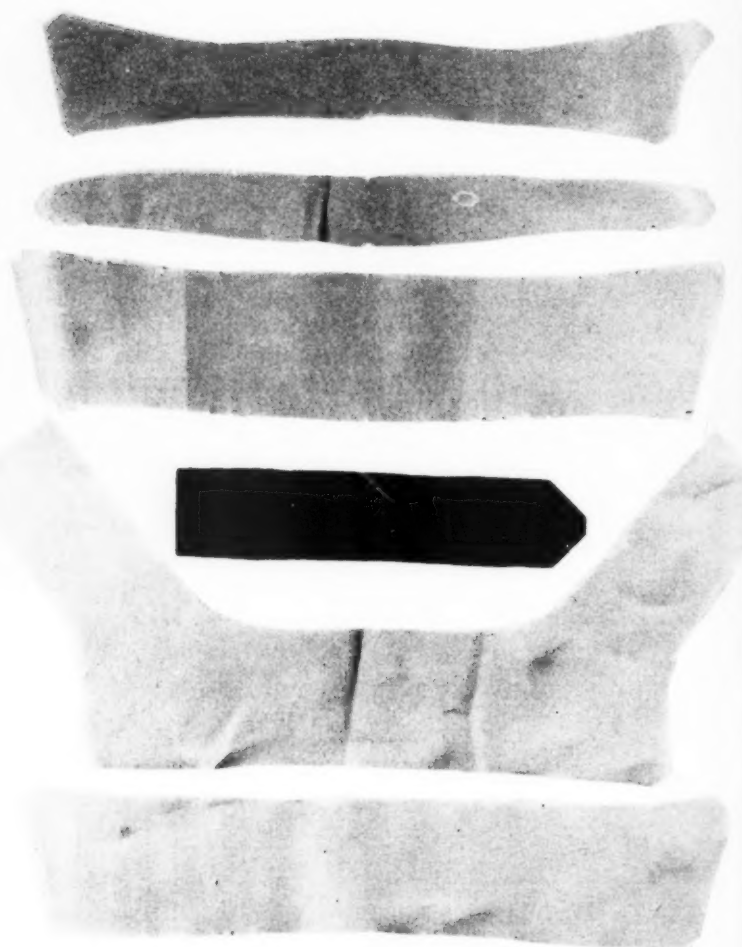
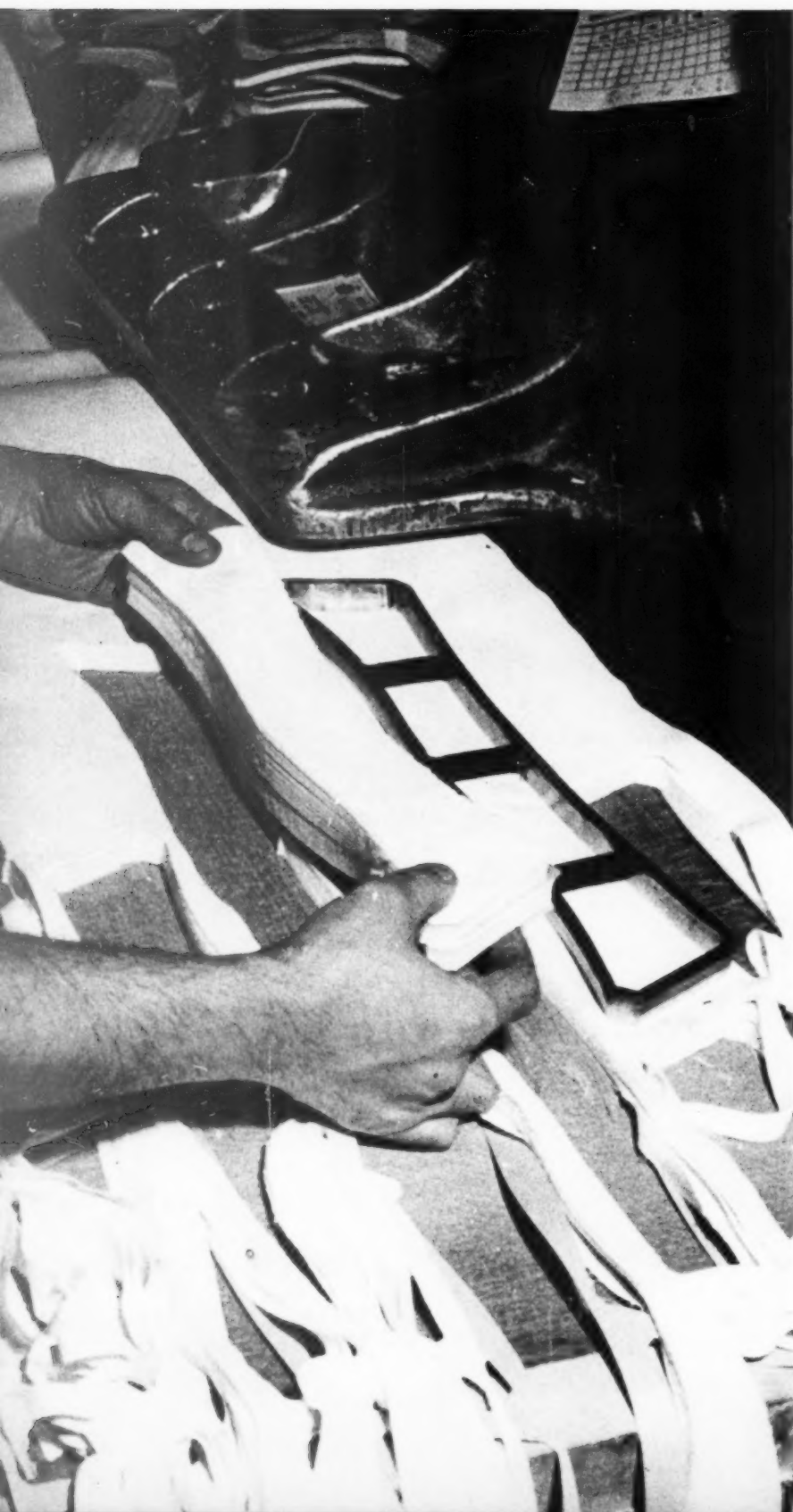
As part of the decor of the living room opposite, Guy Roop used these seventeenth century figures made of gros point embroidery drawn over flat boards shaped according to the contour of the figures. They were originally placed in rooms to people them with an appearance of human company during the absence of members of the family.



*A small part of the stock of dies necessary to meet the requirements of customers for interlinings, which may represent an investment of hundreds of thousands of dollars.*



*Interlinings are die-cut from the fabric on a carefully planned arrangement which insures that there is no variation in the direction of warp and filling, while minimizing wastage.*



*Every customer may have from one to 150 individual interlining dies of different shapes and sizes, which may change from season to season or may be repeated according to demand. Patterns may be cut in cotton or in special fabrics of various weights and colors.*



*Interesting facts about little-known fabrics . .*

## INTERLININGS

*Among the important apparel fabrics which never reach the public gaze are those used for interlinings in many garments. Below are some facts and illustrations taken from the operation of Dubin-Haskell-Jacobson, leading firm in the field.*

AMONG THE UNSEEN FABRICS which are hidden from our eyes while playing their vital apparel roles are interlining fabrics. Most people are aware of interlining in suits and coats but never realize that they are even more extensively used in dress and sport shirts, blouses, pajamas, robes and other categories of men's, women's and children's apparel.

This branch of the interlining industry did not come into existence until about thirty-five years ago when the celluloid collar went out of fashion. Before that time starching was used to give stiffness and body, and collar and cuffs were often detachable as a consequence. As apparel became more informal, collar and cuffs became part of the garment and heavy starching gave way to cotton interlinings.

The annual use of this type of interlining today is between forty and forty-five million yards, of which 90% are cotton fabrics and the remainder mainly nylon and Dacron. Approximately three-fifths of the total yardage come on the market as cut linings, the remaining two-fifths are uncut linings sold in the piece.

When this annual figure is analyzed it can be seen what a major part lining fabrics play in the garment industry. The average amount of interlining for a dozen dress shirts is approximately two-and-one-half yards; for blouses it is still less, about a half a yard per dozen. Thus, the enormous yardage of interlinings used annually is a small but important factor in upwards of forty million dozen items of apparel of all kinds.

Interlinings go into so many different garments because they provide an easy and economical method for achieving and maintaining strength, shaping and style. By reinforcing the fabric, interlinings make it easier to wash and press a garment, enabling it to stand up to the repeated tumbling during the laundering process. Correct interlining reinforces vital wear spots, such as under button attachments and at buttonholes, and assists a garment to sit right, at collar and other vital points. Most important, it facilitates manufacture by serving as a pattern of exact dimensions which the sewing operator, working with the lining outward, can follow exactly, insuring uniformity and accuracy.

### Advent of Colored Interlinings

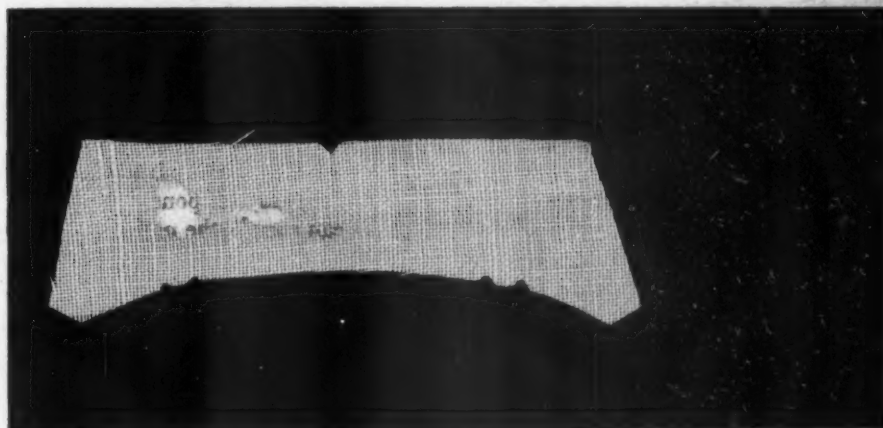
Until recently all lining fabrics were white, but the new emphasis on color in shirts and blouses and the lightweight, sheer fabrics used, have caused the development of colored linings which blend with the outer fabric. A lining which is not the appropriate shade can throw the color of the outer fabric off, especially in sports shirts where collars are open and the neck-band lining may be visible.

It is imperative that lining fabrics offer the same shrinkage resistance as the outer fabrics which they accompany. Thus they are available in three different finishes which offer various degrees of shrink resistance. *Sanforized* guarantees maximum residual shrinkage of 1% in warp and filling; *Pre-shrunk* gives an average of 2% residual shrinkage; *Plain* in which there is from 4 to 5% shrinkage in warp and filling.

A major investment in the lining business is the cost of dies which are used for cutting out linings. The making of a single die costs the lining manufacturer from ten to thirty dollars. A leading firm in the business such as Dubin-Haskell-Jacobson Inc., who do a lion's share of the interlining business in some important apparel categories, maintains on an average approximately 38,000 sets of dies in stock. These dies are made and held for each individual manufacturer and any manufacturer may own from one to one hundred and fifty.

### Scope of the Interlining House

The interlining house finds itself in the middle of a great industry and is called upon at different times to advise everyone from the sewing machine manufacturer



Miniature die-cut collar interlining of all-cotton by DUBIN-HASKELL-JACOBSON.

to the thread supplier, to the collar stylist or shirt and blouse designer. In its scope are all the problems of materials, sewing, and pressing and finishing equipment, which beset the manufacturer. It has final responsibility for making the die, which will in effect control the sewing and correct set of the garment. Dubin-Haskell-Jacobson has built a vertical operation from the raw cotton to the finished die-cut interlinings to insure control of the many variable factors.

An important lining technique is the construction of fused linings. This is done by means of laminating the outer fabrics permanently to the lining fabric with heat and pressure, applied for about 20 seconds, or in the case of woven fusing, by using alternate threads of acetate in the lining fabric which, with the aid of solvent, heat and pressure applied for 12 seconds, are fused to the lining.

Two very recent developments in lining techniques are the employment of crease-resistant cottons which have great spring-back resilience, and the use of metal stays, made by National Flexitized Corporation, sewn-in or removable, which are capable of being easily molded by hand to the set desired, and which are used especially for collars, cuffs, bodices, pockets and peplums.

It used to be Work Clothes . . .

Today it's



## **WORK 'N PLAY CLOTHES**



**AMERICAN FABRICS presents  
THIS NEW CLOTHING CATEGORY**

**growing out of  
NEW CLOTHING HABITS  
dictated by a  
NEW MODE OF LIFE**

**resulting from:**

- The 40-hour week
- High wages
- Shortage of servants
- The do-it-yourself trend
- Citification of farmers
- Ease of travel
- Speed of communication





## WHY CLOTHES FOR WORK-ONLY ARE LOSING OUT

1. They are relics of the 48-hour week.
2. They mark a man as an inferior.
3. They lack dress-up appeal.
4. They are not right for leisure.

**CLINCHER** . . . clothes for work-only are never worn for fun . . . cannot be worn with pride . . . worn only for the sake of necessity that is rapidly ceasing to exist.

## WHY OVERALLS *are FAST becoming* EXTINCT

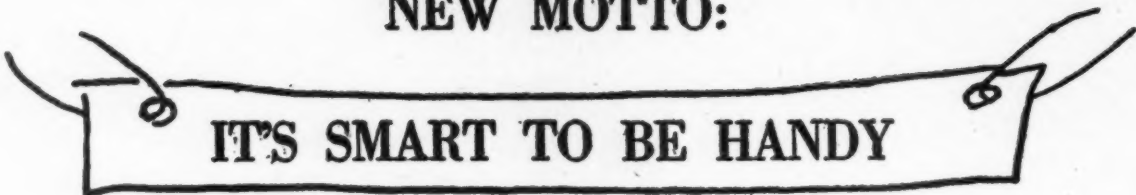
1. They are homely and ill-fitting.
2. They are below the American standard of dressing.
3. They do not obey the New Rule that even the most utilitarian products must have style.

### CASE HISTORY:

It is reported that one of the greatest chains of stores is going to drop overalls from their line.



NEW MOTTO:



IT'S SMART TO BE HANDY

WHAT TO WEAR?

WORK 'n PLAY CLOTHES, of course

DENIMS AND KHAKIS



Cross the Rubicon that  
used to separate.

## WORK 'N PLAY CLOTHES

Denims ... originally for work only, then for school and college, then for sportswear ... and then high fashion in new colors.



Khakis ... originally for work shirts and pants ... Returning G.I.'s wear them everywhere and start khaki craze. Ivy league adopts Chino slacks. Khaki becomes top favorite fashion fabric. New colors and stripes added. Now in Summer Suits!





## Some Significant Developments in this NEW CLOTHING CATEGORY

New sports features on basic work clothes.  
New colors for work 'n play slacks, from  
high shades to pastels.

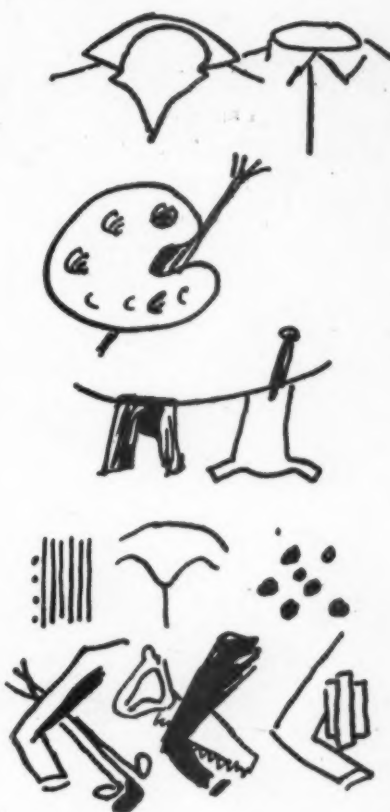
Work shirts in a 100% sport-shirt make.  
Pinks and Helios in work clothing depart-  
ments.

Wash 'n wear fabrics for work 'n play.

Nylon blends for style and smartness.

Regional styles like Western shirts and  
gamblers' stripes.

Blending of styles for work and for school  
...widely accepted by collegians.



## **WANTED** NEW FABRICS FOR THE NEW CLOTHING CATEGORY

RECOGNITION of the new clothing category

EDUCATION of retail sales personnel

PROMOTION to the public

**IT'S SMART TO BE HANDY  
DRESS UP TO YOUR JOB**

## THEY WEAR SMARTER CLOTHES DOWN ON THE FARM

1. New generation of farmers are Cornell grads who wear gingham or flannel shirts with khaki slacks or dungarees.
2. The Hired Man who used to get \$50 a month and a room in the attic now gets \$50 a week and more... with a house and produce free.

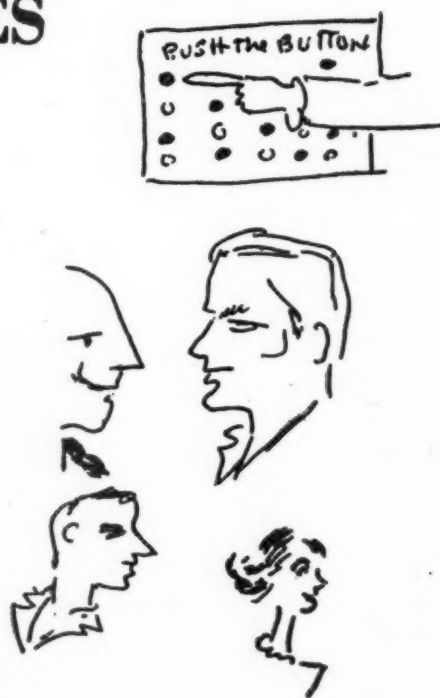
*P.S. Don't forget that girls work on the farm nowadays.*



## THEY WEAR SMARTER CLOTHES IN THE FACTORIES

1. Jobs are safer, cleaner, less arduous.
2. More plants are modernized and air-conditioned.
3. Fewer operations call for protective clothes.
4. Top management likes workers to dress up to their jobs.

*P. S. There are more women in the factories, too.*





# THEY WEAR SMARTER CLOTHES BECAUSE THEY ARE PROSPEROUS



Look at the wages of our workers

Look at the cars they are driving

Look at the T-V sets

Look at the luxury appliances

Look at their social advantages





**CONCLUSION: BETTER LIVING**

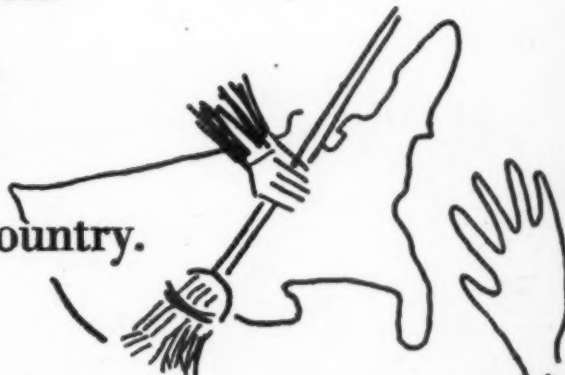
means

**BETTER DRESSING**

---

## DO-IT-YOURSELF TREND CALLS FOR NEW CLOTHING CATEGORY

- 
- 
1. Servant shortage affects all levels.
  2. Top executives do own chores.
  3. Smart matrons do own chores.
  4. Self-service trend sweeps the country.



*"Bless the in the work of thy hand which thou doest..."*

# Yarn Colors vs. Pigment Colors

*In an interesting discussion of a new aspect of color engineering, American Fabrics Color Editor Howard Ketcham tells how dope-dyed fabrics can be employed to harmonize with any auto exterior paint color or two-tone combination.*

TODAY, A PALETTE OF colored yarns can be as flexible as and even more diversified than a palette of paints, but the problems involved in blending yarns are rather different, and so is the solution of these problems.

Yarn colors can be woven together to make intermediate shades, just as paints are mixed for the same purpose, but the yarn colors will retain a little of their own identity, whereas paints sometimes do not. The combination of various brightly colored yarns will have a lively and vibrant quality that cannot so readily be attained with pigments. The finer the twist of a thread of several colors, or the smaller the pattern of the weave, the more homogeneous will be the appearance of the new shade. When the filaments are microscopic in thickness, the fabric may appear to be a solid color, even though it is composed of two or three or even more separate hues. Even in this case, it will have a greater luminosity than if it were piece-dyed in the same shade. Because the combination of various shades can be controlled, and the emphasis, by means of the weave, can be made on one or another of the component colors, a limited range of yarn colors can supply the needs of many different industries.

As with pigments, colors that could never be used in juxtaposition in large areas can be combined very successfully to create intermediate shades in fabrics. No true colorist would think, for example, of using rust and crimson as separate colors in the same decorative scheme, but woven together in a heather mixture, they create a deep brick shade that could find many uses in upholstery for home and automotive needs.

## Extraordinary Versatility Through Color Blending

A good example of the extraordinary versatility that can be produced with few colors for one industry is the new American Enka Jetspun\* line of 17 basic colors. This line, in fact, will produce two-tone combinations which will match most, though not all, of the new automobile colors. Below are listed twenty color combinations together with the particular automobile exterior that each matches. This by no means exhausts the possibilities of this particular dope-dyed color line. In this given case, the blends mentioned are chosen from among new high-style shades that have only recently appeared on the market.

Because the iridescent characteristic of the Jetspun fibers (and of dope-dyed fibers in general) imparts a metallic appearance to fabrics woven of these fibers, two-tone weaves form an especially happy combination with metallic exteriors.

A matching, harmonizing, or contrasting color blend

\*Registered by American Enka Corp.

can be created for every new automobile color, as shown in the following schedule of twenty yarn color combinations which match the 1955 automobile exterior colors listed.

1. Beaver and Crimson for Dodge Heather Rose
2. Crimson and Gold for Hudson Palomino Brown
3. Cordovan and Blue for Dodge Admiral Blue Metallic
4. Crimson and Maroon for Dodge Cameo Red
5. Cordovan and Beaver for Chevrolet Autumn Brown Metallic
6. Beaver and Beige for Buick Cameo Beige
7. Maroon and Peacock Blue for Ford Regency Purple
8. Peacock Blue and Cypress Green for Dodge Satin Green Metallic
9. Peacock Blue and Shamrock Green for Studebaker Saginaw Green
10. Peacock Blue and Shamrock Green for Ford Sky Haze Green
11. Blue and Crimson for Ford Tropical Rose
12. Blue and Kelly Green for Lincoln Galway Green Metallic
13. Blue and Shamrock Green for Plymouth Tampa Turquoise
14. Beige and White for Plymouth Sarasota Sand
15. Dove Grey and Primrose Yellow for Dodge Fantasy Yellow
16. Dove Grey and Cypress Green for Plymouth Palm Beach Grey
17. Shamrock Green and Primrose Yellow for Buick Condor Yellow
18. Crimson and Primrose Yellow for Oldsmobile Coral
19. Crimson and Gold for Studebaker Pima Red
20. Maroon and Primrose Yellow for Plymouth Cypress Brown Metallic

This basic line of seventeen Jetspun colors that has been developed for American Enka can be interwoven in so many ways that it conforms not only to present trends in upholstery fabrics for home and automobiles, and to the currently popular shades of women's clothing, but also allows for changes in color fashions as they appear.

Thus, a weave of rose, crimson and blue blends with



the new fuchsia automobile exterior, and weaves of Enka Beaver, Dove Grey and Steel Blue (smoke blue) in various proportions, sometimes with the addition of black or white, can be made to approximate almost any shade of grey. This is especially important in home furnishings where neutral colors are playing an increasing part.

#### Colors in Their Own Right

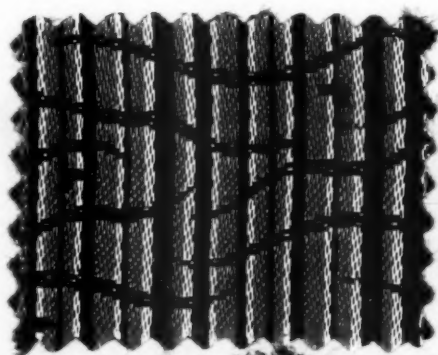
From all this, it might seem that the new color line can be used only in combination weaves and twists. But this is far from the case. Each color has been carefully planned to be pleasant and versatile in its own right. There are shades of bright and of greyed intensity, and each is desirable for homes or automobiles or fashion. Some colors, though not all, are suitable for all three of these purposes. Furthermore, they have been designed to complement or contrast pleasantly with each other so that two or more of them will look well in a decorative scheme or dress ensemble.

The adaptability of the new yarns can best be illustrated in another way by giving a few examples of the very different colors that result from combining a single color with various threads of other colors, either by spinning very fine filaments together, or else in a two-tone weave.

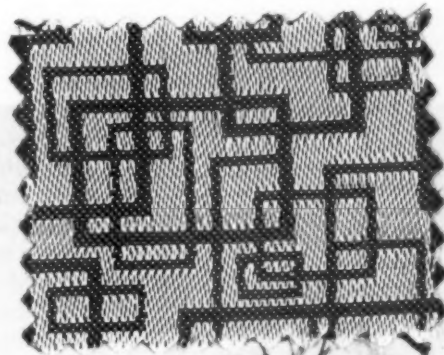
Shamrock Green is a medium bright, medium value shade that can be used by itself wherever a green of this type is needed. But it can also be used to produce entirely different colors, as the following examples show:

*Shamrock Green and Gold make Chartreuse*  
*Shamrock Green and Peacock Blue make Aquamarine*  
*Shamrock Green and Rose make Mauve*  
*Shamrock Green and Blue make Turquoise*  
*Shamrock Green and Beaver make Beige*  
*Shamrock Green and Smoke Blue make Cool Grey*  
*Shamrock Green and Rust make Heather Tan*

Adaptability of the new yarns to provide as wide a variety of different colors as possible is particularly essential in view of the persistent current trend in the automobile industry for new colors for upholstery, to cite just one instance. Each year the public demands new ideas and new designs and especially new colors. No one realizes this more than the automobile manufacturers who through alert styling staffs and comprehensive consumer research not only keep abreast of the times but try to see ahead, so far as color trends are concerned.



Two examples of color coordination in automobile upholstery fabrics woven with Enka's Jetspun. Both by BURLINGTON.



Fabrics of Jetspun are used in the upholstery of the 1955 Plymouth Belvedere.

## Enhancing cotton print fabrics...

*In addition to the factors generally recognized as having brought about the rise of cottons to their present position, new finishes can be held largely accountable for their present popularity.*

THE AIM OF THE finishing industry is to contribute to the production of a fabric that can give simple elegance with easy care. This goes for the newest and the oldest established firms alike, and the latest cotton finish comes from one of the oldest firms, Cranston Print Works, which has been finishing cottons and other fabrics successfully for just about a century and a quarter.

It is an anomaly today for the clothes worn by children and adults to be laboriously laundered, starched and pressed by hand. The advent of new man-made, non-absorbent fibers has demonstrated that it is possible to make garments that can be machine washed, hung up to dry, and worn without ever being touched by the iron. This fact has placed cotton on the spot so far as competition with the new man-made fibers is concerned, although it still continues a great favorite with the public because of its other desirable properties.

Believing that a better finish for cotton print cloths is needed, and basing their confidence on the acceptance of their Fresh-Tex finish, Cranston have put their best researchers over the hurdles of trial and error for several years in seeking an improved chemical resin finish which will meet the needs of the life of today.

This new finish has now been sufficiently perfected for demonstration and marketing. The fabric initially used was an 80 square carded print cloth, but the finish also works satisfactorily on a wide variety of cottons with an equal or higher count.

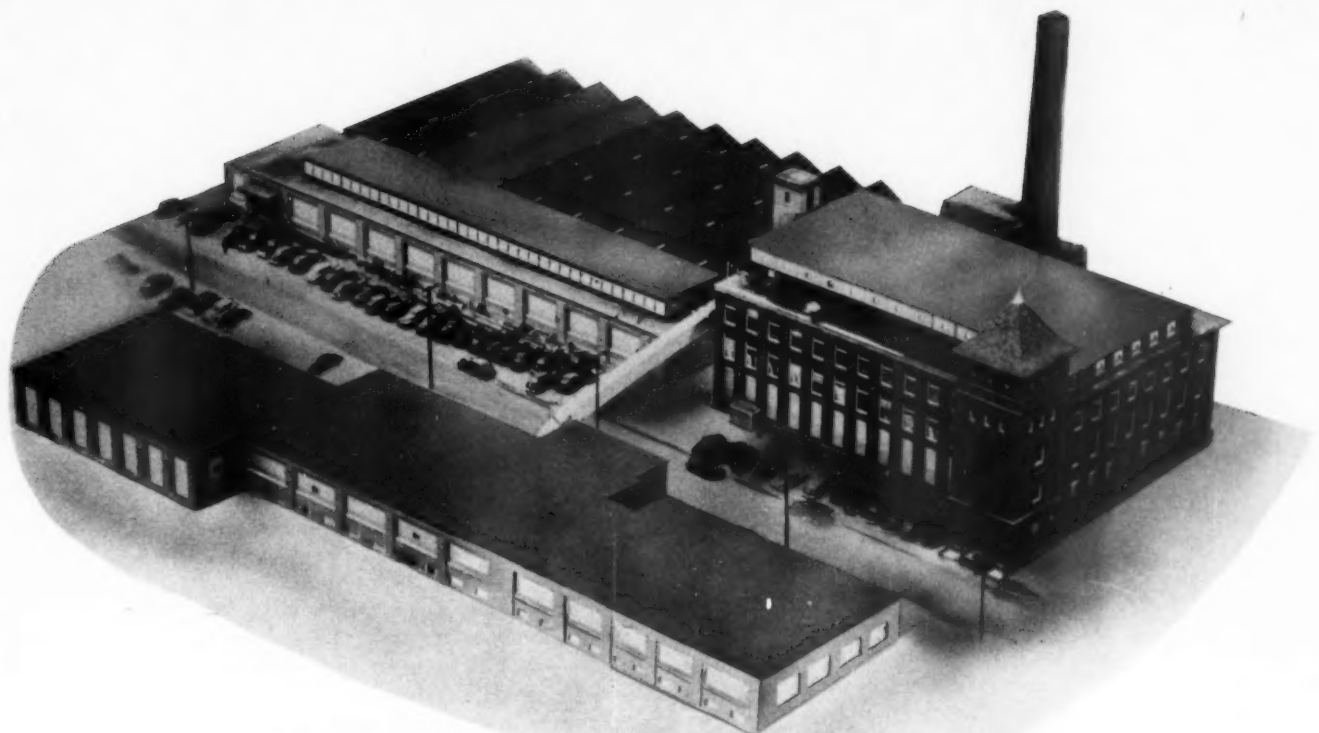
The result of finishing cottons in *Dri-Smooth*, as Cranston calls this new finish, is to make garments machine washable, capable of being dried by tumble action and subsequently worn with little or no ironing. As with other resin finishes, chlorine bleaches and wringing are out of court if best results are to be realized. Some idea of the way this finish performs may be gleaned from the photographs shown which represent items used in demonstration to the trade.

Due to the nature of the finish, the cottons treated with it have a pleasantly soft, rounded hand, dry about twice as fast as untreated cottons, and have a maximum residual shrinkage of about 2%, thus meeting standard requirements in a quality garment.

*The two dresses pictured here are identical with the exception that one has been treated with Cranston's Dri-Smooth finish and one has not. Both have been hand washed, squeezed lightly, and hung to drip dry. Collar, cuffs, and hem have been smoothed and patted into place by hand.*







## THE HALLMARK OF QUALITY

### *American Fabrics visits a New England Lace Mill*

IN THE MIDDLE AGES merchants and craftsmen, united by common interest, formed guilds and associations which adopted certain standards for their craft. They indicated conformity with these standards by special marks stamped on all goods. With the passing of the age of handicrafts and the coming of machine manufacturing methods, the particular kind of identity which the hallmark represented fell somewhat into disuse. The whole picture was changed; the emphasis was no longer on the craftsman or on traditions associated with each locality.

Today the factors in human nature which led to the establishment of the old hallmarks and quality standards have by no means changed, and the striving of the lace industry, aristocrat of textile manufacturers, toward a product of superior quality and inspiration is as strong as ever. The realization that quality of product was one of the foundations of the lace business has not been lost.

The factors making for quality have, however, undergone a subtle transformation with the coming of the big Levers lace machines. It is no longer a question of deft fingers, creative capability and accumulated traditional form. Quality control now becomes linked with machine control; for machines make the yarns, they make the yarns into lace, and they process the lace into finished goods.

Of course, there is still the element of design. With the coming of machines every design has to be adapted to their technical capabilities, but its creative nature remains the most important quality of the end product. This is, in any lace operation, the factor which is still responsible for more intercontinental traveling and heart searching by responsible executives than any other.

#### **The Pattern for Today**

Thus are established anew, as it were, the threads which carry the individual pattern of any lace manufacture today. A visit to the American Textile Company's Pawtucket, R. I. mill provides an excellent illustration of the way they are interwoven in the manufacture and marketing of lace.

In order to carry out an all-round policy of quality control it is necessary to start with the yarns, and for this reason the Ametex operation begins with a throwing mill on the

third floor of the building where the factory is housed. This comprises both down-twist and up-twist spindles. Fine yarns are spun to exact construction and quality required for every individual type of lace ordered. A stock of these yarns of all types of fibers, including nylon, cotton, acetate, Dacron, and others, is necessary for efficient operation of the plant and there is usually a substantial stockpile on hand. On the same floor are located the machines for jacquard card punching and the cards are assembled there. On the second floor, come the fascinating operations of warping, in which thousands of ends coming like a vast cobweb from the creel are reduced to absolute order. In this operation warps of 4000 ends, 5000 yards in length are prepared and held. Beaming is carried out as required for the machines in accordance with the lace types being made. Also located on this floor are seasoning ovens for nylon yarns to insure proper curing and perfect freedom from kinking necessary for fine laces.

#### **The Giant Lace Producers**

In the big machine areas grey with graphite dust on the main floor are located the rows of gigantic Levers machines with their hundreds of thousands of bobbins, which actually produce the lace in continuous strips of up to 225 inch-widths. Adjacent is a machine shop with a large number of lathes, planers, drills and other metal working machines necessary for maintenance, and a fully equipped carpenter's shop for building and repair of creels and other wooden

(please turn)

Mr. Robert A. Appleton,  
President of American Textile  
Company, Pawtucket, R. I.



## HALLMARK OF QUALITY...continued

gear. The stock room for spare parts has to be unusually ample, since Levers machines are not built domestically.

To complete the picture, on the top floor are located the company's administrative offices and the design studios. Here every new idea is considered and, if accepted, translated into technical form, through scale blow-ups and charts in colored inks, in which every stitch, greatly magnified, is plotted through the whole pattern repeat. From these charts it is translated into a series of punch holes in the jacquard cards which operate the bars of the Levers machine.

Incidentally, while lace design is international in character and like every fashion element changes from year to year, Ametex in their pursuit of quality are unique in retaining the whole-time services of a designer, who works with the mill and its customers, and makes at least one trip to the lace centers of Europe each year.

From the Levers machines the racks of lace in a grey state pass to a separate building for subsequent operations. The logic behind the separation of fabrication and finishing is based on the search for fine quality, for the use of graphite dust as a machine lubricant makes it almost impossible to dye and finish white lace perfectly in the same atmosphere with Levers machinery.

Prior to processing, the lace is closely inspected, weighed and measured. This gives an opportunity to catch faults of whatever kind, which can then be traced to their source and eliminated at the point where they occurred.

The dyehouse is arranged with a gallery platform on which all lots to be processed can be laid out for the day's work, preventing their coming into contact with the machines and chemicals with which they and other lots are being processed. The different batches are then washed, dyed and finished in circumstances of almost clinical cleanliness.

### Laboratory Control of Quality

Control of this series of operations is centered in a laboratory adjoining the dyehouse, which is kept at constant humidity and temperature. Through the laboratory pass for testing not only samples of finished goods but of every material supplied to the plant from outside. Thus the least variation in quality, whether in strength, abrasion-resistance, shrinkage, color, finish, regularity, chemical composition, or in whatever other respect, can be located either as due to

bought materials not being to specification, or due to some process carried out in the plant itself.

Other functions performed by the laboratory include recording of every formula used for each lot supplied to a customer, so that any shade or finish can be exactly repeated at any subsequent time; testing new finishing procedures and materials as they come on the market; and evaluating dyeing processes, formulae, etc.

From the washing, bleaching, dyeing and finishing departments the lace passes to further inspection areas where hand mending, the drawing or separation of individual lace bands from one another, and winding on spools is done.

Every order is identified by a ticket which accompanies it right along from initiation of the order to final shipment. This ticket shows the pattern, number of bands, width, fibers used, the number of racks made, etc. The inspector and mender each fill out appropriate spaces on the ticket at each stage, and the ticket accompanies the lots to the dyehouse, through finishing and final inspection. A counterfoil accompanies the sample to the customer for approval.

On the basis of these tickets a report is issued each day to management regarding the type of work as it comes from the machines, and every variation from specification is promptly followed up, thus insuring day to day maintenance of highest quality standards.

American Textile Company was incorporated in 1899 and has, like any other business of standing, seen many changes in the trend of business over the years. But it is worth noting that the persistent pursuit of quality has resulted in recent years in a steady expansion of business. In 1929 a finishing plant was built, in 1945 an extensive receiving department, necessitated by World War II expansion, and in 1947 a new dyehouse was built. In addition to selling the leading quality houses in the lingerie and dress field, American Textile today has a retail distribution of all-over lace in the top-level retail stores in the nation.

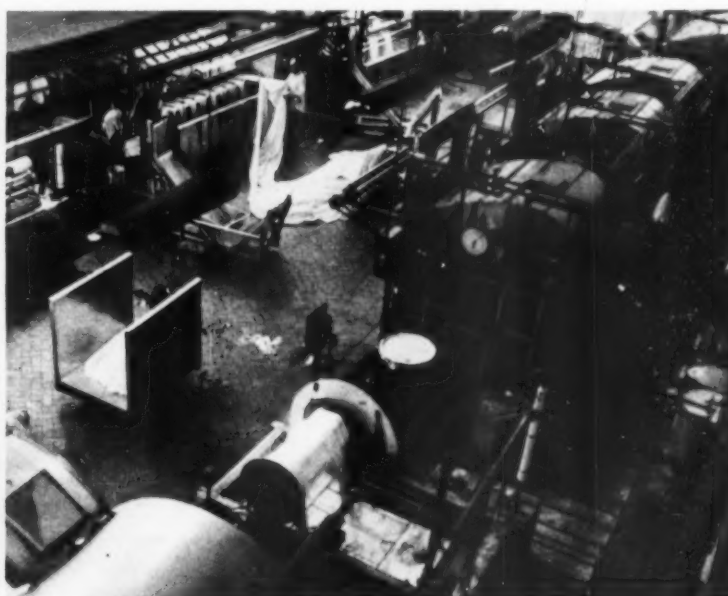
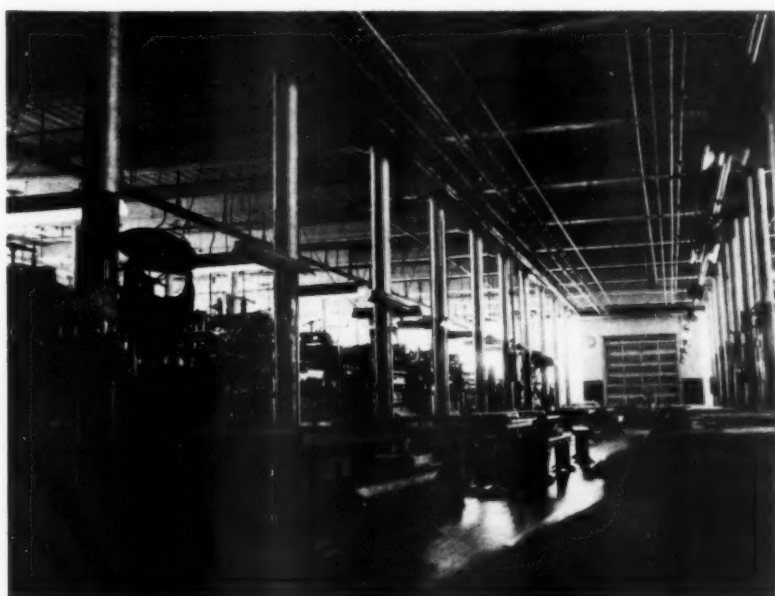
It may be said that the business record of American Textile proves not only their own slogan, "girls are born with a love for lace" but also the much older and more profound philosophy on which the historic merchants' guilds were built, summed up in the terse phrase: "quality pays."



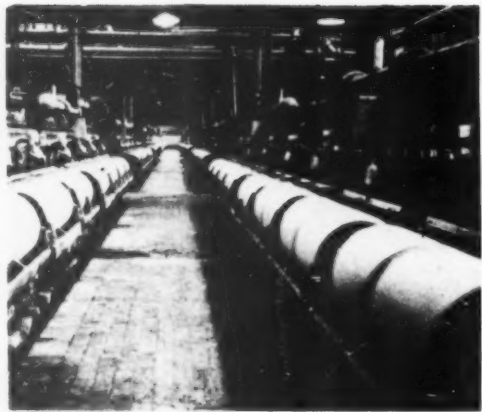
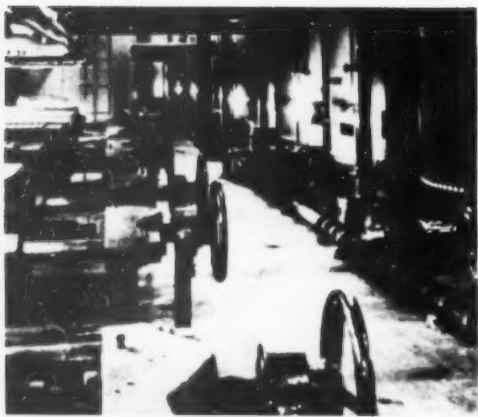
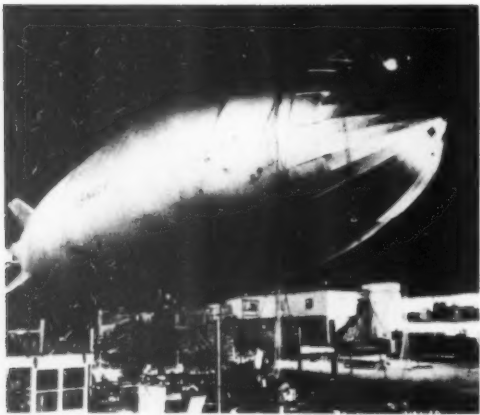
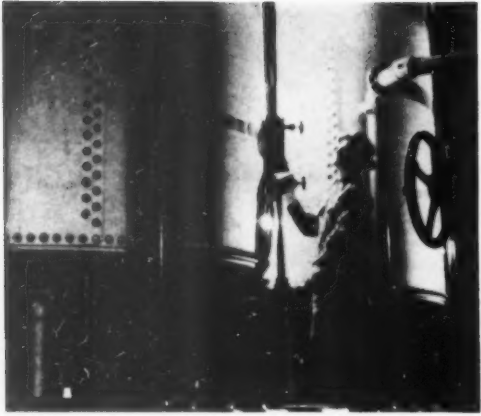




OPPOSITE PAGE: In the design department inspiration from lace centers of the world is interpreted for today's fibers and machines in terms of American fashion trends. ABOVE: Quality control is the ever-present theme in all sections of the Ametex mill and here inspection and fine mending are done in specially illuminated areas by highly skilled workers. BELOW LEFT: A part of the room where banks of vast Levers machines make fine yarns into fine lace. RIGHT: The dyehouse, just showing at top left is the gallery where work for each day is laid out and organized in cleanliness and away from the dye floor.



## A Dress Designer Looks





## at the Fabrics of Industry



### ...And an Industrialist Looks at Fashion Fabrics

IF THEY DON'T, THEY SHOULD.

SURELY IT IS no longer thinkable for a thoroughly alert executive in any field to close the door on his particular compartment and stay there. The dynamics of business forbid.

We have all seen the influence of furniture fabrics on the upholstery of motor cars. We have watched the development of military fabrics like the Army's 9-ounce sateen into work and play fabrics, and the transformation of motifs from industry to the fashion designer's drawing board.

Come to think of it, there are even triple-threat fabrics; for instance, corduroy, which is an apparel fabric, a furniture and drapery fabric, and an industrial fabric. So how can the converter fail to note the fabrics developed for and by the industrialist — or vice versa?

Classifications are overlapping more and more. The areas of interrelation are constantly being extended. It's a wise man indeed who knows where his job ends and another begins, if you think of the job in terms of results rather than protocol. AMERICAN FABRICS takes the position that inspiration knows no boundaries: that users of apparel fabrics can profit from properly presented information about industrial fabrics. By the same token, the key executives of industry can garner a store of fresh ideas and inspiration from the reports and surveys of developments in the field of fashion and household fabrics. The main thing is to enlarge the sphere of creative inspiration. There is no greater hope for growth.



## Progress report on

# POLYURETHANE FOAM

*The first manufacture of this foam material in the United States began four months ago, yet within this short space of time the productive capacity of one factory had to be increased five-fold to meet the response to the new material.*

THE INTRODUCTION OF an increasing number of new non-woven materials in connection with the production of textiles is having its impact on manufacturers, and a great diversity of new, useful and functional fabrics has been developed. Examples too numerous to mention range from the resins used to impregnate fibers in finishing techniques to rubber facing used for conveyor belts by heavy industry. Whatever the non-woven material may be, its use implies the engineering approach in textiles which has so much significance today.

Among the newest comers to the industry is polyurethane foam, first announced locally only last winter, although the process has been in use for some years in Germany. There researchers evolved sponges of this material for bath and household use, brushes without bristles, foams for industrial and technical uses. It should be emphasized that the material known as polyurethane is not foam rubber, nor is it related to the polyvinyl foams, nor yet to the cellulose family, but is a separate type of thermosetting plastic with its own physical properties. Its main virtue for the textile industry is its extreme lightness: it weighs less than 2 pounds per cubic foot, or only 1/20 the weight of an equal volume of water. In apparel as in industrial applications this accords with the all-important principle prevailing of functional performance with lighter and lighter weight.

### A Host of Applications

Among the uses presently being explored are in corset and bra construction, as hip and bust line padding and for outerwear such as men's and women's coats, snowsuits and arctic clothing. It will be used in millinery, for hat bands, for webbing and in domestic applications such as



Erlanger Blumgart's Erlglo rayon lining fabric backed with 3/16" Collo Allfoam applied by permanent bonding process gives warmth, improved abrasion resistance, hand and loft, and porosity. By AMERICAN COLLO CORPORATION.

quilts and blankets. In the decorative and upholstery fields, in the carpeting, automotive and industrial fields, it is able to occupy the same position as foam rubber. Here its uses range from backing and furniture fabrics to linings for mattress pads, to uses in surfacing conveyor belts for breakage reduction, in surfacing walls for sound proofing.

The possibilities of producing polyurethane foams are today reported under investigation by a number of firms, including Goodyear, General Tire, U. S. Rubber, Goodrich, Firestone and others, at least one of which is already in production. The swatch on this page was produced by American Collo Corporation, which has based production on vital techniques developed in Germany, with the help of German-trained experts. Collo polyurethane foam is manufactured in thicknesses from 1/16 of an inch to 8 inches, the only type at present being manufactured in considerable continuous lengths and widths of 30" to 54". It can be attached to fabric either by machine stitching using conventional equipment without special precautions, or by a bonding process through which it can be permanently bonded to any fabric.

### Unique Combination of Properties

The physical properties of this foam are remarkable in offering a unique combination of qualities not duplicated by any other commercially produced substance. These include very light weight with high resilience, high tear and tensile strength, and great abrasion resistance. Its thermal insulation properties are exceptional, the thermal coefficient indicating it is twice as effective as cork or other available foams. It has low moisture absorbency and is strongly resistant to cleaning fluids, acids and alkalis, as well as to heat and mildew, being able to resist 212° wet heat or 300° dry heat. In addition, when in contact with flame it is self-extinguishing, and further resistant properties are under development.

It therefore allows, in combination with fabrics, of the use of all standard techniques of dry cleaning, laundering and, where desired, sterilization. It is highly resistant to aging under these treatments as it is also to deterioration by exposure to sunlight and weathering.

Polyurethane foam can be molded and shaped in open molds, a quality which is desirable for many applications in the apparel field, and this also makes special uses in display and packaging possible. Its cellular structure and the degree of compressability and flexibility can be controlled according to the requirements of the end use to which it will be applied.

Current reports predict that polyurethane foam will be next on the list of synthetic plastics to create a mushrooming industry penetrating a vast diversity of fields. If this takes place, the textile industry of this country will have one more important non-woven material at its disposal, in conjunction with which new end uses and new markets can be created for an increased diversity of textiles and textile products.



American Fabrics presents

# 8,000 Years of Textiles

## PART I

*Every fabric woven today bears the imprint of the accumulated knowledge of centuries of fine craft, and these origins often go further back into the past than we suspect. AMERICAN FABRICS here presents highlights in the origin and history of textiles, the manufacture of which is probably the oldest continuous industry known to man.*

**PREHISTORIC TIMES:** The ruins of the Swiss Lake Dwellers, discovered in the winter of 1853-54, offer sufficient proof that the art of textiles was known in the earliest era of the Stone Age, the period of the mammoth and the cave bear. Yarns of linen and wool were found in plaited and woven constructions. Strings, cordage, rope, and linen yarns were also found.

**SCRIPTURE AND ANCIENT LITERATURE:** These contained many references to sheep, shepherds, cotton, linen, wool, weaving, etc. In Genesis it is reported that "Abel was the keeper of the sheep, Cain, a tiller of the soil." There is a passage in Deuteronomy concerning the dispute between the children of Israel, who wore wool, and the Egyptians who wore linen.

Legend has it that about 6,000 years ago, the Babylonians wore woolen robes. Assyria, Babylonia, and Chaldea are considered the first homeland of wool.

There are many references to flax and linen in the ancient writings. Linen, according to most writers who have done research in the matter, is the oldest fiber known to man.

Textiles of beauty and charm that were woven thousands of years before the coming of Christ, have been found among the earliest ruins of Egypt, Mexico, and Peru, and in the cave dwellings of Arizona and New Mexico.

**4200 B.C.:** Sheep were kept in the Tel Asman or Great Hill region on the banks of the Euphrates River in Mesopotamia. The earliest known representation of sheep is in a mosaic of Ur, not far from the Iranian Gulf. This dates to about 3500 B.C. Around 3000 B.C. people in Britain wore crude forms of woolen garments.

**2640 B.C.:** According to legend, the Chinese Empress Hsi-Ling-Chi discovered the special properties of silk as a filament after accidentally dropping a silk moth's cocoon into a bowl of hot water. She fostered the silk industry by encouraging the cultivation of the mulberry tree, the raising of silkworms and silk reeling.

**2500 B.C.:** An Egyptian mummy of this time was wrapped in fabric containing 540 warp threads to the inch. This is remarkable when compared to the best of English fabrics of comparable nature which run about 350 ends per inch. It is said that the Egyptians placed a shuttle in the hands of the goddess Isis to signify her having devised the art of weaving.

**1500 B.C.:** India was raising cotton and spinning yarn to be woven into fabric. The ancient

Laws of Manu specified that the sacrificial thread of the Brahmin had to be made of cotton (*karpasi*), that the theft of cotton thread was punishable by fines, and that rice-water (*possibly the first starch*) was used in the weaving.

**1000 B.C.:** The Phoenicians were carrying on active trade in raw wool and all types of woven goods with the Spaniards in the port of Cadiz.

**715 B.C.:** Wool dyeing was established as a craft in Rome.

**450 B.C.:** Herodotus, 484-425 B.C., stated that the Babylonians wore a linen shirt or covering which reached to the ground, and was worn over a white tunic. He reported also that the Indian auxiliaries of the Persian King Xerxes were clothed in cotton, and that fabrics made of this exotic fiber owed their perfection to the craftsmanship practised by the Indians for more than 1,000 years.

**327 B.C.:** Alexander the Great, at the time of the invasion of India, expressed wonderment at the beautiful cotton prints made there. Mention was also made of the flax and linen industries. Dating from these discoveries, cotton became the main apparel fabric along the shores of the Mediterranean Sea for the next 300 years.

**200 B.C.:** The Romans were practising scientific sheep raising and breeding. They developed the famous Tarentine breed of sheep, forerunner of the present-day merino breed, by crossing Colchian rams imported from Greece with Italian-bred ewes.

**100-44 B.C.:** Caesar, with the aid of his animal-husbandry expert, Lucius Junius Columella, fostered the breeding and raising of sheep, the production of wool and the manufacture of woolen cloth for his legions.

Columella was a Roman living in Cadiz, Spain, where he crossbred Tarentine sheep with native white sheep of the wandering tribes and conducted other experiments in breeding. He is considered to be the actual developer of the merino sheep. His principles of animal husbandry, expressed in his *De Re Rustica*, are still adhered to in many parts of the world.

**75 B.C.:** Pompey, 106-48 B.C., Roman General and a member of the First Triumvirate, returned from China laden with beautiful silk fabrics. During this era silk became the leading cloth of the Roman Empire.

**63 B.C.:** Cotton awnings made their first appearance in Rome.

**54 B.C.:** Silk was introduced into Rome following the Parthian Wars. Marcus Antonius sent a delegation to Seres (ancient name for China) to arrange for the importation of silks to Rome. The mission, however, did not prove fruitful and Persia remained the main source of supply of Chinese silks.

**EARLY ANNO DOMINI YEARS:** Ovid explained the processes involved in making woolen fabric. Shortly after, Pliny stated that woolen garments could be made without the spinning and weaving processes. He also made reference to the finest wool sheep in the world of his time, the original Tarentine sheep. The growing of cotton and the raising of sheep in Egypt did not escape the observations of Pliny, who extolled the work being done there in cotton culture and animal-husbandry.

Seneca wrote about the lustrous, shiny thread (silk) gathered by the Seres (Chinese) from the boughs of trees.

Pausanias, noted traveler and geographer of this era, believed that silk came from an animal twice the size of a large beetle which resembled a spider. He also thought that the Chinese fed the silkworms on green reeds until they burst, whereupon the filaments were found within the body.

**SECOND CENTURY:** Elis, Greece, was the homeland of the first cotton raised on European soil.

Arab traders were the first to import cotton in quantity to Italy and Spain. Arrian, an Egyptian-Greek, in his *Circumnavigation of the Erythraean Sea*, was one of the first to mention cotton. A century before this time, Arab traders brought Indian calico, muslin and other cotton fabrics to ports on the Red Sea and thence to Europe. It is said of Omar, one of the caliphs of Mahomet, that "he preached in a tattered cotton gown, rent in twelve places."

**THIRD CENTURY:** Japan began to learn much more about sericulture from Koreans who had gained their knowledge from the Chinese. Though silkworms were introduced in Japan as early as 195 A.D., it was not until this time that the Japanese began to take genuine interest in sericulture.

**273:** Emperor Aurelian refused the plea of his wife for a single garment of purple silk on the ground that it was too sheer, and sheer extravagance. A pound of silk at that time was worth its weight in gold.

(please turn)

## 8000 Years of Textiles . . .

**FOURTH CENTURY:** Ammianus Marcellinus, Roman Emperor, speculated that the soil in China was as soft as wool, and that after sprinkling with water and then combing, it would be possible to form cloths such as silks. This was still another effort to explain silk which was a great mystery to Europe.

The cultivation of silk started in India when, according to legend, a Chinese princess, given in marriage to an Indian prince, brought him silkworm eggs and mulberry tree seeds hidden in the lining of her headdress.

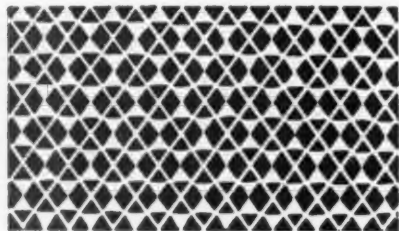
**EARLY FIFTH CENTURY:** Herodotus, in writing of the wonders of India, spoke of the splendid breeds of sheep and the excellent woolen cloths which he found made there.

**552:** Two Nestorian monks succeeded in bringing from China a few fertile silkworm eggs hidden in the hollow of their canes, which they presented to the Emperor Justinian. This was the beginning of a silk industry in the West. In a short time, under the direction of the monks, eggs were hatched, worms raised, black mulberry trees planted, and Constantinople was on its way to becoming a silk center.

**EARLY EIGHTH CENTURY:** The Saracens overran Spain and introduced to Europe beautifully woven textiles which became highly prized.

**EIGHTH CENTURY:** Chinese manuscripts mention the decoration of textile fabrics by coating with wax, a method now known as batik dyeing.

**712:** The first known mention of sheep in England relates that the price of a sheep was one shilling "until a fortnight after Easter."



**768:** Charlemagne became king of France. He favored the textile industry and established the two world-renowned textile centers of Lyons and Rouen; the former city is still the silk designing and weaving center of the world. A few years later, Charlemagne instituted the cloth fairs throughout western Europe. These centers are still the clearing houses for world buyers and sellers.

**796:** Charlemagne of France and Offa, King of Mercia, in north-midland England, made a treaty in which the length of woolen cloths and cloaks was discussed.

Charlemagne granted charter to English pilgrims in France to carry on trade in English Monastery wool. This is often referred to as the first English trade agreement.

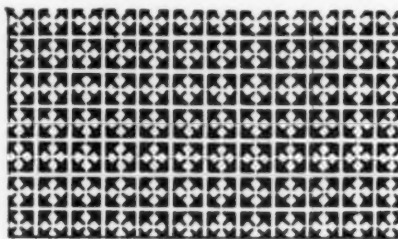
**NINTH CENTURY:** The knowledge of sericulture spread from Greece to what is now Italy, Spain, and Portugal. In time, other European nations learned of the wonders of silk, especially France, which today is one of leading silk designing and silk weaving centers.

**804:** Hamburg and Lübeck were founded by Charlemagne. These cities became clearing house ports and supplied the rest of the world with many products, including textiles. Itinerant textile workers of all types gathered there,

as well as textile merchants, cloth brokers, etc.

**877:** The Mohammedan Wars interfered with the importation of silks from the Far East, and caused the Greeks to take more than passing interest in sericulture. Around this time the Chinese rebel, Baichu, destroyed Canfu, the great Chinese city noted for its silk exports. The destruction of this city cut off all silks intended for the then known Western World.

**EARLY TENTH CENTURY:** Cotton raising and cotton weaving were developed in Spain. The Arabians fostered cotton culture in Sicily.



**900:** Alfred the Great, who reigned from 871 to 901, did much to stimulate the wool industry in England. His mother fostered spinning among the women at home, to increase the supply of yarn available for weaving.

**925:** Wool dyers' guilds initiated in Germany.

**961:** Indoor cloth halls were established in Flanders, in the cities of Bruges, Ghent and Ypres; the idea came from methods of bartering observed by travelers to the Orient.

**979:** The Teutonic Guilds were founded in London under charter granted by King Ethelred III in return for twenty pounds of pepper each year. These mercantile groups carried on successful business in England until they were banished by Queen Elizabeth in 1578 as a retaliatory measure against Germany.

**ELEVENTH CENTURY:** During the 10th and the 11th centuries Flanders clothed Europe in woolens, and Flanders, Brabant, some of the German towns, and France were producing fine linens. The rise of the guild system was instrumental in the growth of the textile industry.

**1000:** Venice dominated the textile raw material and finished products markets and retained this position for many years, since it was the center of Asiatic and European trade.

York, England, had an extensive trade in raw wool and woolen cloth.

Around this time cotton began to be raised commercially in China, fostered by the Tartar tribes. For three hundred years before this it was used in China as an ornamental shrub.

**1066:** With the arrival of the Norman conquerors, Bristol and Exeter in England became great centers for sheep raising.

**TWELFTH CENTURY:** The conquest of Constantinople by the Venetians in this century gave the latter access to the rarest types of silk fabrics. Raw silk was shipped to Venice whose looms now began to supply all in Europe who could afford to buy the luxury material.

**1111:** Henry I of England established the Scottish woolen industry at the mouth of the Tweed, which separates England and Scotland.

**1120:** Henry I, England, scattered and relocated the skilled Flemish workers then in Eng-

land among the towns, villages and hamlets so as to increase the textile knowledges and skills of his own people. He sponsored the first merchant guild about this time, the woolen cloth weavers. Other guilds soon came into being. At this time the guilds were composed of those who did not sell their labor but only the product of that labor. This method laid the economic foundation of medieval textile activity.

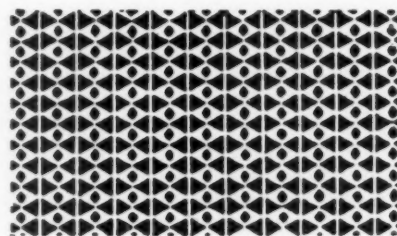
**1128:** The famous Cistercian monks, also known as the Trappists, arrived in England from France. They settled first in Waverley and Surrey and in time built abbeys in Yorkshire and the Welsh marshes. In a few years the monks were to become the largest sheep producers in the world. By 1143 they had built 50 abbeys and the one at Fountains had 15,000 sheep while Rievaulx boasted of 12,000 sheep.

**1146:** Outside of Constantinople, the silk industry had made very little progress in the Western World in the past 400 years. Greece and northern Africa, thanks to the Saracens, had made some progress but the industry, although given encouragement, could not be classed as flourishing. The only places up to this time where silk was produced were Sicily and southern Spain under Saracen influence.

The first Norman king of Sicily, Roger, fought the Greek Empire and in the course of the struggle was able to capture many silk producers and silk weavers as towns capitulated. These artisans were sent to Palermo, Sicily, where the industry had been fostered by the Saracens. Palermo soon became the center of the industry in Europe and caused other cities, in time, to become interested in sericulture.

**1147:** The first white mulberry trees for sericulture were planted in France by Guipape de St. Aubon. The trees had come from Syria where he had observed their value at the time of the Second Crusade.

**1150:** Some Hebrew cloth manufacturers from Flanders went to England. In spite of persecution, they participated in the woolen trade and gave impetus to it.



**1153:** Under King Stephan, English woolen production reached a point where a royal charter was solicited and granted to the Priory of St. Bartholomew to hold an annual cloth fair, the first to be held in England.

**1154-1189:** During these years of the reign of Henry II, England, a charter was granted to the guild of woolen-cloth weavers who were allowed the exclusive privilege of importing raw wool to London. This grant was opposed by English sheep growers who desired to ban the importation of the superior Spanish wool. Immediately after the death of Henry in 1189, Parliament passed a law making it a crime to mix English wool with wool from Spain. The idea was to promote all-English wools and woolen fabrics.



**1164:** Weavers' and fullers' guilds were now established in seven English cities.

**1173:** The Spanish rabbi of the Kingdom of Navarre went to Jerusalem and reported that the only dealers in wool were Hebrews. Two hundred of them were in this business.

**1188:** First mention of guilds for dyers of textiles in England.

**1193:** There were guilds for weavers in Florence. Cloth merchants' guilds were also founded around this time — *arte della Callimali*. These guilds prevented, for the time being, the formation of guilds for dyers since they were considered as weaver's assistants.

**1195:** Wool raised by the Cistercians paid a part of the ransom for Richard Coeur de Lion.

**1197:** King John, of English Magna Carta fame, persuaded Parliament to regulate the dyeing of woolen cloth which was offered to the buying public.

**THIRTEENTH CENTURY:** Cardinal Barberini reported 16,000 looms in Seville, Spain, and that Catalonia, because of its excellent output of high quality woolen cloth, had good trade relations with Byzantium, Egypt and Greece. Barcelona was also coming into its own as a noted textile center.

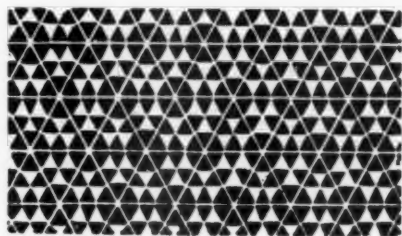
St. Andemai, in England, spoke of weaving and dyeing woolen cloth, with purple and red colored fabric used for religious rituals.

This century saw the rise of the famous Monastery Wool which was grown under the auspices of the many abbeys in England, Scotland and Wales.

The Florentine, Rucellai, re-discovered the ancient art and the method of making purple dyes from certain lichens that had been sent him from Asia Minor.

**1203-1209:** The Venetians scored many victories over the Greek Empire and their booty included silk districts in Greece.

They introduced the industry to other Italian city states. By 1300, several thousand persons were in the silk business in cities like Bologna,



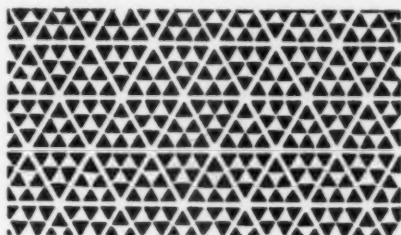
Genoa and Milan. Bologna became known for the only successful silk throwing mill in Italy, a position it held until around 1500 when other cities established throwing plants of their own.

**1210:** Alexander II, King of Scotland, chartered cloth-merchant guilds in Aberdeen, Perth and Sterling.

**1212:** By this time, the flourishing city of Florence had about two hundred wool dyers, fullers and cloth cutters or tailors, and published a directory of weavers and spinners.

**1221:** Henry III, England, ordered the mayor of London to burn every piece of woolen cloth which contained Spanish wool. This action was designed to protect and foster home production and consumption.

**1240:** Imported fabric of good quality reappeared in England. English wool merchants began to export some of their wool to Flanders. By 1248, wool merchants were quite well established in London, with a well-welded organization that was powerful in the textile trades.



**1250:** Flanders was sending much linen fabric to England where it was now in great demand.

Satins were now being woven in the southern European nations—Spain, Portugal, and Italy. Almeida, in Andalusia, Spain, was particularly noted for its richly woven silks.

Silk fabrics were now being made to some degree in England, but they could not compete with the silks from the south of Europe. The higher classes in England were now wearing costly silks that came chiefly from Italy. One thousand knights appeared in silk raiment at the wedding of the daughter of Henry III, the sponsor of the silk industry in England.

**1252:** The Humble Fathers of St. Michael moved from Alexandria, Egypt, to Florence, Italy, and took with them their knowledge and skill in spinning yarn, and weaving and dyeing cloth. They had looms capable of the most intricate weaving.

**1253:** Marco Polo, in his account of the Persians, observed that "there are excellent artificers in the city who make wonderful things in gold, silk, and embroidery. The women make excellent needlework in silk with all sorts of creatures very admirably wrought therein."

Some fine linen goods being made in England; Sussex and Wiltshire were the weaving centers at the time.

**1261:** Henry III, England, noting conditions on the continent, prohibited "export of any or all English wools."

Coventry was at this time noted for its raw wool, woolen fabrics and cap cloth. The King allowed the people of this city to tax all wool processed locally into cloth in order to raise funds for public improvements. He sanctioned the plan for five years and then it was cancelled.

**1270:** The first banking law on record emanated from Venice. It was to protect depositors in transactions, textiles and otherwise, with other nations; merchant-operated banks came into being.

**1271:** "All workers, male and female, as well of Flanders, as of other lands, may safely come to our realm, there to make cloth." This was a decree from Henry III, England. A year later he was to speak of the great raw wool business in the Kingdom and of the amount of commerce done with the city state of Florence.

**1273:** Alfonso the Learned, Spain, decreed that "all shepherds of Castile are to be incorporated into the Honourable Assembly of the Mesta of the Shepherds." The group received a charter and for over 500 years exerted the

greatest care for the merino sheep of Spain. No other nation was able to obtain any of these prized sheep until 1765.

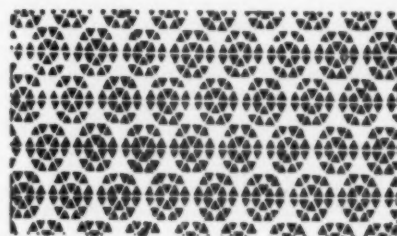
**1275:** So vast were the numbers of sheep raised for their wool in England that even the serfs in the village of Swyncombe averaged 50 sheep on a per capita basis.

**1285:** Florentine banking houses were making generous advances in money to English abbeys in return for the entire raw wool output. The merchants and banking houses of Florence and the English abbeys enjoyed many years of good business intercourse, chiefly in wool transactions.

**1290:** Woad, the only blue dyestuff known at this time, began to be extensively raised in Germany. The three major dyes were now madder, weld, and woad.

**1298:** Around this time the more affluent people were wearing woolen shirtings, linen fabrics were becoming more prevalent and silk gowns, some of which were embroidered with gold and silver, were favored by the ladies.

**FOURTEENTH CENTURY:** Venice had over 17,000 woolen cloth workers. Philip the Fair of France, 1285-1314, was so jealous and alarmed at the popularity of Flemish woolens that he forbade their purchase by his people. It did not, however, prevent his agents from buying them for his own wardrobe since they were definitely much superior to comparable French cloths.



Sheep raising was now the most profitable agricultural pursuit in England. The abundance of wool was an important factor in the growth of a native woolen industry. Merchant guilds such as the *Gilda Mercatoria* were organized to handle the situation.

Pedro IV, Castile, Spain, imported Barbary rams to be used in crossbreeding with his own sheep to improve the wool staple fiber.

Silk manufacture was now in a flourishing condition in the Italian city-states of Bologna, Florence, Genoa, Lucca, and Modena.

**1305:** Louvain and the surrounding country in Flanders boasted of about 150,000 journeymen weavers.

**1307:** Edward II, successor of Edward I, England, decided to rid himself of all creditors, whose number had waxed great under "Longshanks," a moniker applied to Edward I. By 1311, on the pretext that foreign creditors in England were considering leaving England en masse, Edward confiscated all the English property of the supposed aggressors. The largest group among these recalcitrants was the Florentine contingent. Many were merchant-bankers who had large interests in the famed Monastery Wool. By 1320, most Florentine merchants had left England leaving their interests there.

English wool sent to Florence was now shipped via the port of Genoa. Frequent city

(please turn)

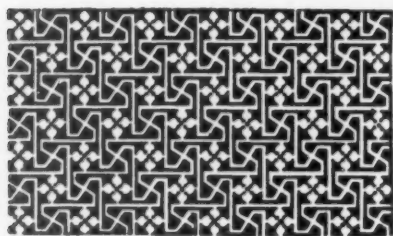
## 8000 Years of Textiles . . .

state wars in Italy, however, greatly interfered with this method of shipping wool by sea from England to Italy.

**1310:** Florence produced over 100,000 pieces of woolen cloth on an annual basis. The wool came chiefly from England, Sardinia and Spain.

**1315:** First mention of the word, *worsted*, dates from the reign of Edward II.

**1326:** Foreign-made cloth was forbidden within the confines of England, Ireland and Wales by Edward II.



**1327-1377:** Edward III has always been known in history as the *Father of English Commerce* and the *Royal Wool Merchant* for he did much to make the importance of his land felt in world commerce. He offered protection to all foreigners living in England and to those who might come to improve the textile industry.

**1336-60:** The earliest recognition of silk occurred in an act decreed by Edward III, England, whereby English merchants were restricted to a single line of goods. Many of the merchants, a great number of whom had come from Italy, had been offering the various types of silk fabrics that were being made in Italy. Edward followed up his laws as rigorously as possible, but *owling* or smuggling became rampant.

**1337:** Flemish textile workers began to pour into England as a result of the earlier edict of King Edward III. Wool was now a crown commodity and the king announced that he would buy all English wool. Much of the wool had to be seized since many growers were not in sympathy with the rulings on wool. Disappointed merchants received promissory notes for their investments and then Parliament had to pass drastic laws prohibiting the export of English raw wool. Smuggling had become such a problem that it is said to have been the reason for the rise of the British Navy.

**1339:** Bristol, England, began to set up looms for the manufacture of woolen goods.

**1340:** The Humiliates and the Benedictines joined orders and made the city state of Florence just about the most powerful city state in Europe. The religious orders had over 200 communities in Florence and were growing in numbers and in importance. There were 30,000 craftsmen in Florence who were producing about 80,000 pieces of cloth per year. These figures do not include cotton and linen goods.

It was around this time that Leonardo da Vinci designed his flyer for use in the spinning of yarn and his device for shearing of finished woolen fabrics to make them have a rather smooth surface effect.

The famous de Medici family were the patrons of textiles, merchandising, and also of the textile-banking business. These Florentines laid the foundation for world commerce, trade and banking, local and foreign. Members of

this renowned family were members of the various textile guilds and many of them were well versed in the respective fields. It may be said that the Medici founded banking as a necessary adjunct to the great textile industry and its far reaching branches.

**1346-1350:** Another great influx of Flemish workers went to England. This laid the genuine groundwork for the present British woolen and worsted industries.

**1349:** This was the year of the Black Death in England. In the chaos, stress and strife sheep raising became most unpopular because "Sheep have eaten up our meadows and our downs, Our corn, our wood, whole villages and towns."

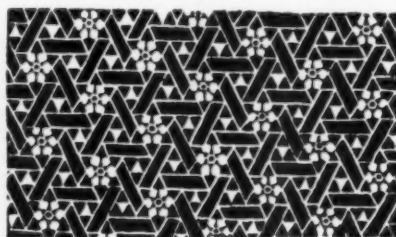
**1350:** Sir John Mandeville, English explorer, on his return from India wrote that, "there grew there a wonderful tree which bore tiny lambs on the end of its branches. These branches were so pliable that they bent down to allow the lambs to feed when they are hungry." He was speaking of cotton.

Around this time, satin was first mentioned in England when Bishop Grandison made a gift of choice satins to Exeter Cathedral.

**1351:** A Flemish decree prohibited the sale of woolen cloth beyond a distance of three miles from the town in which it was made. Alarmed at the English attitude of this time, the Flemings passed laws which were intended to improve the quality of their fabrics offered to the buying public and to keep the standards in accordance with the seals of the respective Flemish cities. Every city had its Cloth Examining Board, which was made up of three persons chosen by local authorities. The Flemings were of the opinion that quality counted more than quantity, and that quality would sell their products. These decrees caused many weavers to go to England for work.

**1380:** Louvain, Flanders, lost much of its textile manufactures because of the insurrection of journeymen weavers, a severe blow to this great city.

**1385.** The six-hundred-year-old city of Bruges in Flanders was now the "center of commerce of all Christendom."



**1386:** The organization of the Linen Guild in London, England.

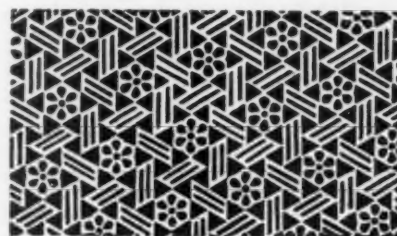
**1394:** The King of France sent fine linens made in Rheims as a ransom to the Sultan for some noblemen who had fallen into the hands of the latter.

**1398:** Much ado about the ban on woolen cloth in England, the beginning of a long struggle between the woolen manufacturers and the Crown.

**FIFTEENTH CENTURY:** Ypres, in western Flanders, because of its thriving textile industry,

was larger, more populous and of greater importance than London.

Early in this century, Cennino Cennini of Padua described a *Method of Painting Cloths by Means of Moulds*. Today this method is known as block printing. This is the oldest form of printing textiles known to man.



**1400:** About this time, the Wool Wheel or High Wheel, with an intermittent motion, came into being.

**1429:** The first European book on dyeing appeared under the title of *Mariegola dell' arte de Tentori*.

**1436:** Coventry, England, became noted for its manufacture of woollens and woolen caps.

**1455:** Silk was being manufactured in England, and the British, in hopes of making England a leading silk center, passed a law forbidding the importation of foreign goods, which was in force for five years.

**1461-1483:** Edward IV, England, modified the rather harsh law of Edward III concerning the non-exportation of raw wool from England. Citizens were permitted to sell their wool outside of the country provided it was sent to Calais, France, for distribution. The law was not lifted until the time of Queen Elizabeth, who allowed full exportation of English wool.

**1466:** Edward IV, England, in order to curry favor with Henry of Castile and John of Aragon allowed the shipment of some English sheep to Spain. The catch in the gift was that the sheep were not of high quality and much below Spanish merino sheep in classification.

**1470:** York and Beverley, during this time of the War of the Roses, suffered great losses in sheep and woolen cloth industries were disrupted. The dissolution of the monasteries also had a serious effect on the woolen industry.

**1472:** Edward IV incorporated the Dyer's Company of London.

**1480:** Louis XI, King of France, became a patron of the silk industry in Tours.

**1488:** Knitted caps became very popular with the poorer classes in England, so much so that a law was passed placing ceiling prices on them. The word knit was rapidly becoming a very common term at this time.

Another English decree stated that woolen fabrics could not be sent out from England unless they were fully *dressed* or finished.

**1490:** This era may be said to mark the decline of Spain as a textile power, not so much in sheep but in the fabric markets. Just prior to this year, Ferdinand V banished about 100,000 woolen workers from Spain because they were of Saracenic origin. Philip III in this year, "in an endeavor to drive all heathens from the country," banished 700,000 aliens, many of whom were textile workers.



**1492:** Columbus discovered that the Indians of the new world had cotton cloth which they used for mantles, bags and breeches. He took samples of Sea Island cotton back to Spain where it evoked great curiosity. Knowledge of the cotton fiber, gained during the Crusades by way of Egypt, Persia and the Far East, was now spreading throughout Europe.

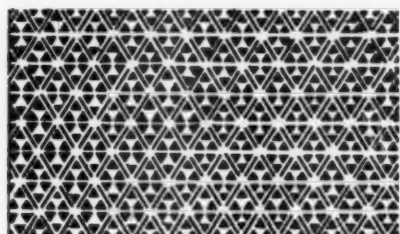
**1496:** The Magnus Intercursus Act of England was drawn up to assure a free market for the sale of woolen cloths to the Netherlands.

**1497:** Vasco da Gama sailed around the Cape of Good Hope and discovered a new route to India. This voyage has had much to do with the changes in the social, political and economic phases of world commerce and culture, down to the present day.

**1507:** France, Germany, and Holland began the cultivation of dye plants.

**1516:** Henry VIII placed many Flemish workers in Coventry. They introduced new spinning and weaving methods which made the city famous as a textile center for centuries. The famous woolen fabric called *Coventry Blue* originated there.

**1519:** Pizarro and Cortez found the *little white flower* cotton in Mexico, Central and South America. Cortez sent to the Spanish king many cotton cloths and garments with red, yellow, green, blue and black figures on them, proof that these American natives knew about the block printing method of coloring textiles. Red cochineal from Mexico and Peru was now being sent to Spain for use as a dye.



**1520:** Francis I, the father of the silk industry in France, brought silkworms from Milan, Italy, to the Rhone Valley, where they have been reared ever since. Francis laid the foundation for Lyons and Paris; the former as the world center for design and motif in fabrics of high quality, the latter as the world center of fashion and style in apparel.

**1522:** Cortez, the noted Spanish explorer, appointed some officials to introduce sericulture in what is now Mexico. Acosta, the Spanish chronicler of records, says that the venture died with the century.

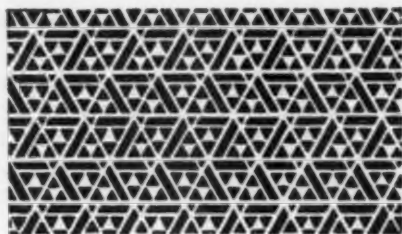
**1529:** The distaff was introduced into England by Anthony Bonvoise, an Italian.

**1533:** A citizen of Brunswick, Germany, Johann Jurgen, a wood carver by trade, invented the so-called *bobbing-wheel*, also known as the Saxony Wheel. This was a regular spinning wheel with a cranked axis on the large wheel, and an added treadle by which the spinner could rotate the spindle with one foot. The wheel improved the quality of yarn for handloom weaving and did it faster than previous models. Jurgen received his ideas from sketches of Leonardo da Vinci made about 60 years before. Jurgen also designed

the flyer used in processing cotton into yarn.

Pizarro, conquerer of Peru, said that Peruvian woven fabrics were superior to those made in Spain and that their woolen cloths were comparable to linens made in Egypt.

**1536:** First mention of cotton growing in America made by the explorer, de Vaca, who explored what is now Louisiana and Texas.



**1539:** Henry VIII, England, suppressed 190 abbeys and monasteries in Great Britain which resulted in the demise of Monastery Wool, a product which had been in great demand from the 6th century to this time. These communities housed upwards of 50,000 persons at the time of the suppression; their annual income was close to twelve million dollars.

**1540:** Spaniards brought sheep to Mexico and native Indians began to weave wool into blankets. The Pueblo Indians became expert weavers, but in time rebelled against the Conquistadores. The Navajo Indians received the sheep of the conquered and dispersed Pueblos. Only the best of present-day textures compare with the Pueblo and Navajo weaving.

**1541:** Coronado had about 5,000 sheep with him on his trip from Mexico City across the Rio Grande into what is now the United States. His voyage took him to about the present site of Dodge City, Kansas. He was searching for the "Seven Cities of Cibala." Some of the sheep died en route, some were eaten, and some were captured by various Indian tribes encountered on the way.

**1549:** Edward VI, England, encouraged foreign Protestants to come there to work in the textile industry. Varying numbers did bring their talents, chiefly Germans, Walloons, French and some few workers from Italy, Poland and Switzerland.

**1555:** The Weavers' Act in England limited those who lived outside the old urban limits of towns and cities to two looms for making woolen fabric. The law was not too rigidly enforced, however.

**1562:** The Guild for silk throwers founded in Spitalfield, England.

**1567-1575:** Queen Elizabeth was instrumental in bringing about the immigration of Dutch and Flemish refugees, many of whom were textile workers who were fleeing the Spanish Invasion of Flanders and the Netherlands. The work and influence of these workers did much to enhance the British textile industry, particularly in woollens and worsteds.

**1573:** John Tice, England, claimed to have perfected tufted taffetas and wrought velvets.

**1578:** Antwerp, then a Dutch possession, was sacked by the Spaniards; and the powerful Merchant Adventurers, trading companies, fled to the city of Hamburg, but the Germans for-

bade their staying there. Queen Elizabeth, in support of the English merchant groups, then banished all German merchants from England, including many long-established textile traders with offices there. The Teutonic Traders, some with 600 years of residence, left England.

**1582:** During this chaotic period on the Continent and in Great Britain, the English boasted of the fact that they were exporting annually 200,000 pounds worth of fabric, about one million dollars worth per annum.

**1585:** Philip II, Spain, invaded Flanders. The Dukes of Alba and Parma made shambles of Antwerp, Bruges, Ypres and other Flemish cities. Thousands of skilled workers had to flee to other nations and many of these went to England, France and Ireland. Elizabeth welcomed all the workers who came to British shores and these groups did much to make England more of a textile power.

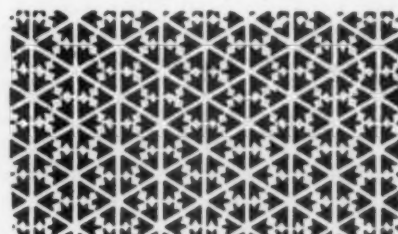
**1588:** Spain had a world-wide reputation for its merino sheep which they kept as a monopoly until the time of the defeat of the Spanish Armada by the English. Despite the defeat and the treaties made concerning sheep, it was not until 1765 that other nations succeeded in receiving merino sheep from Spain. England was supposed to have received some merino sheep shortly after the Spanish defeat but it took almost 200 years to fulfill the arrangement.

**1589:** William Lee invented the knitting frame. This stocking frame knitted only woolen stockings until 1598 when Lee perfected his machine so that he could knit silk stockings. Queen Elizabeth was presented with the first pair made on the machine, and was much pleased since they were not as cumbersome as the woolen stockings and possessed a kindlier feel.

**1590:** After the defeat of the Spanish Armada, the English, conscious more than ever of their sea power, began the manufacture of their own sail cloth, the beginning of an important segment of the textile industry.

A knitting school for children was begun in York; three teachers were employed.

**1598:** Juan de Onate, Spanish explorer set out to explore the American Southwest and covered about the same route as Coronado in 1541. He had 3,000 sheep with him, the Churro type, a low grade breed. De Onate gave some of the sheep to each Indian tribe encountered on the way. The Franciscan and the Jesuit missionaries on the voyage with him included several animal husbandry experts. They aided the Indians in caring for the sheep left with them, taught them pastoral life and gave general instructions for breeding.



**1600:** American cotton was offered to English cloth makers, who were buying supplies from the Near East and the response was small.

(To be continued)



# THE CONSUMER

*The millman, the converter, the apparel manufacturer, the retailer, the retail clerk . . . all constantly use textile words and phrases as selling blandishment . . . all assuming that Mrs. Consumer knows what they're talking about. Sadly enough, a good deal of it is incomprehensible to her. And so writer Cora Carlyle gathers a*

**Q. I am trying out a sheer curtaining made of Velon, but I did not receive any instructions at the time of purchase about the care of the curtains. Can you aid me, please?**

**A.** The recent application of Velon to sheer tailored and ruffled curtains has evinced much interest. There are several tips necessary for its successful care that we will pass on to you.

Since these curtains must never be twisted, wrung, or crowded in the cleaning process, because these actions would cause wrinkles, we urge hand washing. Use a large container, water at lukewarm temperature, and any synthetic detergent. Soak the curtains in one or more successive solutions until the dirt has been removed.

Then lift from one water to another, and finally rinse the curtain, without squeezing. When it is clean, hang dripping wet over a rod. The drying will be rapid. No iron should touch the fabric, or shrinking and melting may result. No bleach should be used in washing, nor is starch necessary as the crispness is inherent and will remain so. These curtains are mothproof and hold their shape very well. The ivory color is natural and may deepen a trifle with use.

If the curtains are sent to a dry cleaner, be sure to identify them, otherwise he may use methods such as tumbling and pressing which would be harmful.

**Q. My attention has been called to a new product — Fiber-fill. Can you furnish some information on it?**

**A.** This term seems to be taking the place of the word pillowstock, which was used by the Du Pont Company to indicate its Dacron filling material for the stuffing of pillows. Now that the material has much wider actual and potential applications — for example, in comforters, sleeping bags, furniture stuffing, and automotive upholstery, life preservers, etc. — the new term is more suitable to the actual situation.

**Q. It was brought to my attention recently that a new tag is being placed on carpets and rugs, telling the consumer that the rugs can be cleaned satisfactorily. Can you enlighten me on this score?**

**A.** What you refer to is the new *Seal of Cleanability*, issued by the National Institute of Rug Cleaning, Inc. This organization realized some time ago that there have been many varieties of rug and carpet constructions put on the market since World War II, many more than in any other period in recent times. When you consider the new fibers, new textures, new blends of fibers and new constructions, this point can be appreciated. Some of the newer fibers clean well and easily, others do not.

The Institute requested an impartial testing organization to make a wide series of tests on rugs and to award the Seal whenever earned. The presence of the Seal enables both consumer and retailer to be sure of cleanability with reference to carpets and rugs. In addition, manufacturers who submit their wares for testing and then find something not just right, can correct

the defects before the rug is put on the market.

Some of the qualities checked include: Shrinkage, performance of the rug backing, performance of the constructions and blends when processed by standard rug cleaning methods, the effects of spotting agents, and resistance to fume fading.

**Q. There is much talk today about the crimp in fibers. Just what does this mean? In my younger days I heard the word used with regard to the crimp in a woman's hair-do. Is there any connection here or not?**

**A.** Crimp as applied to textile fibers means the same as wave, in the hair. In the wool fiber, for example, there is a natural crimp, and many of the newer man-made fibers can be easily crimped to produce desired qualities. The advantage of crimp in fibers is that it will provide waviness in the surface-effect of some fabrics and fluffiness without added bulk. When applied to knitted fabrics, the elasticity of the goods is enhanced.

**Q. Why do elastic waistbands stretch so much, even after only one washing or dry cleaning?**

**A.** Elastic webbing plays an important part today in the garments worn by the whole family. Not only is it used in waistbands for shorts, skirts, slacks, jackets, house dresses, snowsuits, but also in the tops of hosiery for men, women and children. The chief reasons for using it are comfort and fit, so if it loses its elasticity its value is lost.

There has been considerable research done on this problem and efforts are being made to solve it at the construction level. In the meantime, there are a few useful hints which may help you prolong the life of the elastic.

1. When washing any article of clothing which contains an elastic section, never flex, twist or squeeze the elastic portion, because it has been established that the yarns which cover the elastic tend to shift and perhaps change tension while wet, thereby cutting the rubber.
2. Never hang a garment to dry so that there is any tension on the elastic.
3. Never touch an iron to an elastic webbing.
4. In brief, handle the webbing as little as possible during the washing and ironing processes. The same rule applies to the dry cleaning of elastic webbings.

**Q. Is there such a process as printing fabrics in vat dyes? I imagine there must be, and if there is, can fabrics printed this way be judged as reasonably fast?**

**A.** Yes, vat dyes on prints give excellent results. Incidentally, vat dyes are not painted on nor merely deposited onto the surface of the goods; they become an actual part of the chemical composition of the fibers themselves and will remain in the fabric indefinitely. Vat dyes are used chiefly on cottons and viscose rayons. It is especially desirable to buy goods that are vat dyed where frequent washing and laundering are essential. These



# WANTS TO KNOW...

*group of typical Mrs. Consumers before each issue goes to press . . . asks them what they'd like clarified in textile terms . . . and puts the questions to Dr. George Linton, Textile Editor. Here is the latest group, and the answers may provide illuminating information for the benefit of many readers.*



dyes are almost impervious to sunlight, sea water, perspiration, crocking or rubbing off of color, bleaches, and dry cleaning.

**Q. I bought an Orlon suit which I noticed had a noticeable pucker along the seams. I thought I could press this out at home, but, try as I did, I could not. Now after three cleanings, the puckers are worse. My dry cleaner says they must be caused by the construction of the garment. What do you think?**

**A.** We are advised by experts that this seam puckering is caused by improper sewing during manufacture. Proper tension, correct number of stitches per inch, right speed in sewing, the size of the needle — all these are important.

Widespread education of cutters and sewers is helping to eliminate the puckers about which you speak and much progress has been made by training operatives in the work. However, there is no way at all whereby you can remove the puckers in the suit you mention.

**Q. I have a wide skirt made of felt. Recently, a glass of water was spilled over it, and when the dress dried the surface where the water had been appeared shrunken. Is there any way to remedy this?**

**A.** Since felt is not a woven fabric, shrinkage is liable to occur when the material is wetted. Take the article to a pressing establishment and ask that it be steamed lightly, all over. This will cause the whole skirt to shrink slightly but not enough to affect the size.

**Q. Do imported felt hats have to be labeled?**

**A.** Much misunderstanding has arisen on this subject and some of the confusion arises from the practice of importing wool felts in body form, along with fur felt bodies, and then having them shaped, banded, trimmed, etc., in this country. The importers have thought at times that they had transformed the hat into a different article, and so did not label the origin.

As a matter of fact, the Trade Practice Rules for the Millinery Industry make the proper course to follow very clear when they state that "it is an unfair trade practice to sell a hat which contains a fur or a wool felt body made in a foreign country unless this fact is clearly marked on an exposed surface of the hat."

**Q. Before buying new sheets recently, I measured my bed and then went out and bought what I thought was the correct length. To my discomfort, after one or two washings I found the sheets too short and more or less of a total loss to me. How did I miscalculate?**

**A.** In estimating the length of sheet you need, always keep in mind that the measurements noted on the label represent the torn size and do not take into account that after this measure is recorded, several inches are turned up for the hems. In addition, no allowance is made for shrinkage, which may run

as high as five percent. Consequently, if a sheet is labeled 99 inches long, there may be a loss of five inches or so turned into hems, plus a shrinkage loss of five inches to be expected.

**Q. As a matter of common sense, is it not possible to use the same sizing system in women's dresses, coats, suits, etc.? I would like to learn something of the possibilities of this being done.**

**A.** You are not the first one to have thought about this matter. For a long time thought has been given to this question. The latest effort comes from the Commodity Standards Division of the U.S. Government. They have already put in ten years of work, experimentation, labor and research on this item. There have been recommendations made to various and sundry trade associations in the garment industry, seeking acceptance. The matter, at this time, is still in abeyance and in a state of flux.

**Q. When entertaining guests for dinner I like to use candles, but occasionally the candle wax will drop on my tablecloth. How can these drippings be removed?**

**A.** First of all, there are dripless candles on the market. They burn so that the wax forms a liquid cup at the wick and does not descend along the sides of the candle.

However, with a regular candle, when warm or hot wax drops onto a fabric, the problems involved are not only how to remove the wax but how to prevent impairing the color if the cloth is dyed. Since the methods will vary with the fabric content, it is suggested that you refer the matter to your dry cleaner. Home methods may result in damage to your cloth.

**Q. My dry cleaner returned a dress to me today with several spots where color had been lost on the shoulder and neck areas. The spots were not there when the garment was sent out, but the cleaner says I must have done something to cause the color loss. I racked my brain, and then did remember that I wore the dress the last time I gave myself a home permanent. Is it possible that the solution caused this condition?**

**A.** This timely question may be answered in the affirmative and you are not the only one to report this situation. The chemicals used in permanent waving solutions are very likely to cause loss of color on fabrics. In beauty parlors, it is customary to protect the customer carefully from all contact with any of the solutions used. At home, however, one may not be so careful.

Sometimes the stains (change or loss of color) do not show up immediately. Often they will not be noted until after dry cleaning, and sometimes after home pressing. Our advice is to wear an old garment when having a permanent, whether at home or in the beauty parlor. These stains from the permanent waving solution cannot be rectified, except in isolated cases when there is a complete loss of color and a matching dye might be brushed on.



### Advertisers' Index and their Advertising Agencies

AMERICAN ENKA CORP. .... 7 <i>Anderson &amp; Cairns, Inc., New York City</i>	EVERFAST FABRICS INC. .... 22 <i>Kelly, Nason, Inc., New York City</i>
AMERICAN TEXTILE COMPANY, INC. .... 5 <i>Leon A. Friedman, New York City</i>	GALEY AND LORD ..... 4 <i>Donahue &amp; Coe, Inc., New York City</i>
AMERICAN VISCOSE CORP. .... 3 <i>Hirshon-Garfield, Inc., New York City</i>	METLON CORP. .... 18 <i>Ehrlich &amp; Neuwirth, Inc., New York City</i>
JOSEPH BANCROFT & SONS COMPANY (EVERGLAZE) ..... 16 <i>John Gilbert Craig Advertising Inc., Wilmington, Delaware</i>	PRINCETON KNITTING MILLS ..... 26 <i>Ehrlich &amp; Neuwirth, Inc., New York City</i>
BATES FABRICS, INC. .... Inside Back Cover <i>James P. Sawyer, Inc., New York City</i>	SECURITY MILLS, INC. .... 12-13 <i>Sterling Advertising Agency, Inc., New York City</i>
BEAUNIT MILLS, INC. .... 17 <i>Alfred J. Silberstein-Bert Goldsmith, Inc., New York City</i>	STRONG, HEWAT & COMPANY, INC. .... 11 <i>Jules L. Klein Advertising, Pittsfield, Mass.</i>
CELANESE CORP. OF AMERICA ..... 19 <i>Ellington &amp; Company, Inc., New York City</i>	TRAVIS FABRICS, INC. .... 9 <i>Bachenheimer-Lewis, Inc., New York City</i>
CHATHAM MANUFACTURING COMPANY ..... 25 <i>The M. H. Hackett Company, New York City</i>	UNION CARBIDE AND CARBON CORP. (DYNEL) ..... 8 <i>Anderson &amp; Cairns, Inc., New York City</i>
CHEMSTRAND CORP. .... Inside Front Cover <i>Doyle Dane Bernbach Inc., New York City</i>	UNITED STATES RUBBER COMPANY (LASTEX DIV.) ..... 14 <i>Fletcher D. Richards, Inc., New York City</i>
CRANSTON PRINT WORKS ..... 23 <i>Anderson &amp; Cairns, Inc., New York City</i>	VIRGINIA-CAROLINA CHEMICAL CORP. .... 10 <i>Albert Sidney Noble Advertising, New York City</i>
E. I. DU PONT DE NEMOURS & CO., INC. .... 15 <i>Batten, Barton, Durstine &amp; Osborn, Inc., New York City</i>	WOOLMARK CORPORATION ..... 6 <i>Liller, Neal &amp; Battle Advertising Agency, New York City</i>



No matter how you go

Nettie Rosenstein designs a deceptively simple dress to take you anywhere in the world, without a care in the world. Its perfect poise is inbred in the fabric: "Yorksheer" a Bates Disciplined favorite of all combed Egyptian cotton... always beautifully ready for weekend visit or world cruise. Garden green, Bittersweet or Violet; 8 to 14. \$115



 **Bates**

**DISCIPLINED FABRIC®**

*There's nothing in the world like it!*

releases creases • stays clean longer • no in-between pressings  
washes easily, dries fast and smooth • irons with a light stroke • colorfast  
shrinkage-controlled • permanently fresh and lustrous

BATES FABRICS, INC., 80 WORTH STREET, NEW YORK 13

FINE ARTS DEPT

PUBLIC LIBRARY  
JUL 15  
DETROIT

# American FABRICS

NUMBER THIRTY-THREE SUMMER 1955

Indian Inspiration Issue



